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FOREIGN DIRECT INVESTMENT IN BLANTYRE, MALAWI: OPPORTUNITIES AND CHALLENGES

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The Millennium Cities Initiative (MCI) is a project of The Earth Institute at Columbia University, directed by Professor Jeffrey D. Sachs. It was established in early 2006 to help sub-Saharan African cities achieve the Millennium Development Goals (MDGs).

As part of this effort, MCI helps the Cities to create employment, stimulate enterprise development and foster economic growth, especially by stimulating domestic and foreign investment, to eradicate extreme poverty – the first and most fundamental MDG. This effort rests on three pillars: (i) the preparation of various materials to inform foreign investors about the regulatory framework for investment and commercially viable investment opportunities; (ii) the dissemination of the various materials to potential investors, such as through investors' missions and roundtables, and Millennium Cities Investors' Guides; and (iii) capacity building in the Cities to attract and work with investors.

The Vale Columbia Center on Sustainable International Investment promotes learning, teaching, policy-oriented research, and practical work within the area of foreign direct investment, paying special attention to the sustainable development dimension of this investment. It is a joint center of Columbia Law School and The Earth Institute at Columbia University.

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Acronyms and Abbreviations

ADMC	Agricultural Development and Marketing Corporation
ACDI/VOCA	Agricultural Cooperative Development International Volunteers in Overseas Cooperative Assistance
AGOA	African Growth and Opportunity Act
BASFA	Balaka Area Smallholder Farmers' Association
CAMAL	Coffee Association of Malawi
CBD	Central Business District
CDA	Cotton Development Association
CMV	Cassava Mosaic Virus
COMESA	Common Market for Eastern and Southern Africa
DFID	Department for International Development
ELISA	Enzyme-linked Immunosorbent Assay
EPD	Economic and Political Development
EPM	Eastern Produce Malawi
EPZ	Export Processing Zone Act
EU	European Union
FAO	Food and Agriculture Organization
FDA	Food and Drug Administration
FDI	Foreign Direct Investment
GPM	Groundnut Pigeon Pea Multiplication
GSB	Growing Sustainable Business
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
ISP	Internet Service Provider
HPLC	High Performance Liquid Chromatography
MACRA	Malawi Communications Regulatory Authority
MASH	Malawi Association of Spice and Herbs
MBGs	Milk Bulking Groups
MBS	Malawi Bureau Standard
MCI	Millennium Cities Initiative
MDI	Malawi Dairy Industries
MDGs	Millennium Development Goals
MGDS	Malawi Government Development Strategies
MIPA	Malawi Investment Promotion Agency
MMM	Malawi Milk Marketing
MoAFS	Ministry of Agriculture and Food Security
MRFC	Malawi Rural Finance Company Limited
MSAs	Milk Shed Areas
MTL	Malawi Telecommunications Limited
MVP	Millennium Villages Project
NGO	Non-Governmental Organization
NASFAM	National Smallholder's Farmer's Association Malawi
NASDEC	NASFAM Development Corporation
NASSCENT	NASFAM Centre for Development Support
NASCOMEX	NASFAM Commodity Marketing Exchange
NSO	National Statistics Office
NORAD	Norwegian Agency for Development Cooperation
NSSD	National Strategy for Sustainable Development

OIBM	Opportunity and Investment Bank of Malawi
RBM	Reserve Bank of Malawi
SADP	Smallholder Agribusiness Development Project
SARRNET	South African Root Crops Research Network
SCFT	Smallholder Coffee Farmers Trust
SHMPA	Southern Highlands Milk Producers Association
SIPA	School of International and Public Affairs
SME	Small and Medium-sized Enterprise
TNM	Telecom Networks Malawi
UNDCF	United Nations Capital Development Fund
UNDP	United Nations Development Program
UK	United Kingdom
US	United States of America
USAID	United States Agency for International Development
WSSD	World Summit on Sustainable Development
ZISFA	Zikometso Smallholder Farmers Association

Currency and Units

MK	Malawi Kwacha (1 US Dollar = 137 MK, as of February 1, 2009) ¹
US\$	US Dollar
°F	Fahrenheit
°C	Celsius
Ha	Hectare (1 ha = 10,000 square meters)
Kg	Kilogram (1 kg = 2.2 pounds)
mm	Millimeter (1/25 inch)
m ³	Cubic meters
ppb	Parts per billion

¹ Oanda.com. <http://www.oanda.com>

Executive Summary

Introduction

In 2006, the Earth Institute at Columbia University launched the Millennium Cities Initiative (MCI), an urban counterpart to the Millennium Villages Project (MVP), to assist nine mid-sized cities across sub-Saharan Africa in achieving the Millennium Development Goals (MDGs). MCI provides research and policy analysis in order to attract foreign direct investment (FDI) to the cities. Increased FDI flows can help to create employment opportunities and foster local enterprise development and sustainable economic growth. In addition, MCI is helping the Millennium Cities to carry out needs assessments in a number of social sectors. The data from these assessments will enable MCI to generate integrated City Development Strategies to help each city meet the MDGs.

Currently, the principal destination for FDI in Malawi is agriculture, most notably in tobacco and sugar. According to the World Investment Report 2007, Malawi had US\$30 million of FDI inflow in 2006, compared to only US\$7 million in 2003. Major sectors of investment in addition to agriculture include telecommunications, manufacturing, tourism, and mining. The bulk of FDI inflows come from the UK, the US, and South Africa.

Malawi has been relatively politically stable since its independence in 1964. Moreover, the transition from one-party rule to a multi-party democracy has been largely peaceful. The Government encourages both domestic and foreign investors to establish and own business enterprises in most sectors of the economy. Furthermore, Malawi is party to numerous multilateral and regional trade agreements including the Common Market for Eastern and Southern Africa (COMESA), Southern African Development Community (SADC), the US African Growth and Opportunities Act (AGOA), and the Cotonou Agreement/Everything But Arms (EBA) Initiative. Additionally, bilateral trade agreements exist with South Africa, Zimbabwe and Mozambique, and a customs agreement with Botswana. A number of tax incentives in Malawi are enshrined in the main tax legislation that includes the Customs and Excise Act, the Income Tax Act and the Export Processing Zones (EPZ) Act.

While Malawi's investment climate has been strengthened during the last decade, the country is still facing a number of major challenges. In addition to its landlocked position, which can result in high transport costs of more than 30 percent of the country's total import bill, Malawi's poor power and water infrastructure also impedes the attraction of investment. In 2004, companies on average suffered power disruption of 50 days, compared to 48 days in Tanzania and 15 days in Zambia. In addition, interest rates are among the highest in Africa. According to the IMF, the 2009-projected lending rate is 25.0%, compared to 13.5% in South Africa. The cost of finance is a major obstacle for firms in Malawi.² Malawi ranked 118th (out of 180 countries) in the 2007 Transparency International Corruption Perceptions Index. To address this issue, President Bingu Wa Mutharika has made the fight against corruption a top priority.

Using information gathered from literature reviews and the first field visit, the authors assessed investment opportunities across eleven industries: cassava, chili, coffee, pigeon pea, cotton, macadamia nuts, tea, dairy, banking, telecom, and tourism.

Using the investment evaluation framework described in Section I, the authors identified the textile manufacturing sector as having considerable investment potential, distinguished by higher impact and feasibility. Investment in this sector is expected to have high positive impacts on employment and productivity, as well as high feasibility measured by demand, supply, enabling market and profitability factors. Currently, garment producers in Malawi are uniquely positioned to benefit from the preferential

² Economist Intelligence Unit. *EIU DataServices*. <https://eiu.bvdep.com/frame.html>.

access granted by AGOA. A requirement for locally or regionally sourced raw materials comes into effect in 2012, forcing garment producers to source raw material regionally without a fully developed local textile-manufacturing sector. This will force Malawi to compete with the world's largest garment suppliers on equal ground. Given the lack of textile manufacturing facilities in the country, a significant opportunity exists to invest in textile manufacturing facilities. Investment in this sector would entail a capital investment in an existing company or the establishment of an entirely new textile manufacturing company. Mapeto, the country's sole textile producer, is looking to expand its weaving capacities. This represents a unique opportunity to investment in the industry at a time when Malawi still enjoys preferential access to international markets. A second alternative is to set up a new company encompassing a vertically-integrated textile-manufacturing operation. Blantyre City is optimally located in either case, since it serves as the headquarters of two of the country's three cotton ginneries and most of the garment producers.

In addition to textile manufacturing, which is the sole high feasibility-impact sector, the authors identified five medium feasibility-impact sectors. These investment opportunities include the following agricultural value-added products: cassava processing, pigeon pea processing, chili processing, groundnuts processing and macadamia nut processing.

Analyses of industries with limited investment potential are included in Appendix I. Having identified opportunities for investment, the authors also evaluated constraints hampering the growth of each industry. These constraints are provided in the individual assessment sections.

Considering the aforementioned constraints associated with FDI in general, as well as with individual industries, the authors set forth recommendations for MCI with a view to encouraging FDI in the High Feasibility-Impact sectors and alleviating constraints that hamper growth in these sectors. These recommendations include the following:

- Identify investors for high feasibility-impact sector investment opportunities;
- Advocate for the alleviation of supply-side bottlenecks;
- Support institutional capacity building of key agencies, such as the Malawi Investment Promotion Agency MIPA, the Malawi Bureau of Standards (MBS) and the Malawi Export Promotion Council (MEPC) MEPC;
- Establish stronger linkages between MVP and MCI;
- Encourage partnerships with development agencies and NGOs for value-added projects.

I. Mandate and Investment Evaluation Framework

1. Mandate

The authors were mandated by MCI to focus on the following three objectives:

- To identify viable and feasible investment opportunities in Blantyre;
- To assess the various FDI opportunities that create sustainable economic development in Blantyre;
- To provide MCI with recommendations on programming priorities, by focusing on the types of FDI that offer deep, positive and sustainable impacts on Blantyre's development goals.

2. Methodology

The key research question to be answered in this working paper is: What viable/feasible investment opportunities exist in the city of Blantyre and which of those can offer sustainable development that can contribute toward the achievement of the MDGs in Malawi? As such, the paper focuses on:

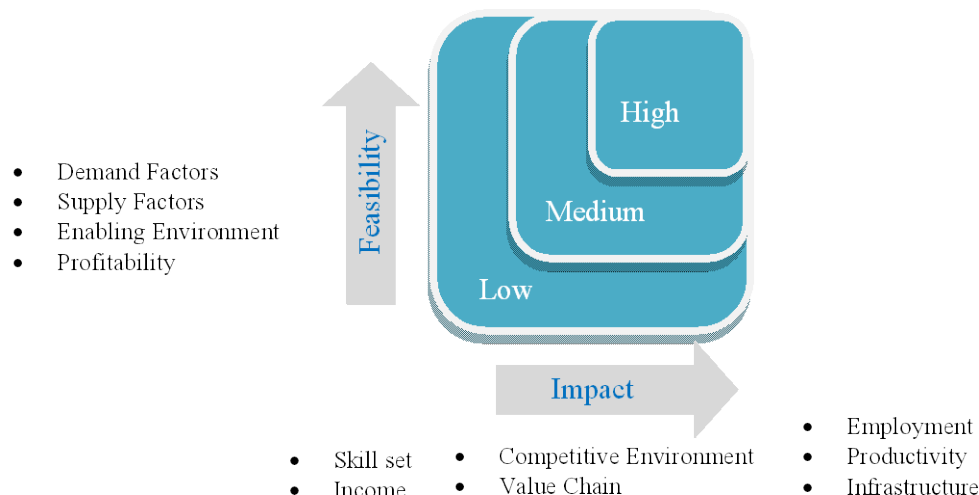
- The analysis of key industries with potential to attract FDI;
- An assessment of key industries from two aspects:
 - The feasibility of FDI in Blantyre, including constraints and opportunities; and
 - The potential impact of FDI, i.e. the various ways in which different types of FDI can positively contribute to Blantyre's development plans.

The achievement of the above objectives entailed the successful completion of various sequenced, time-bound activities that were executed within the framework of an established methodology.

Investment Evaluation Framework

The authors used an Investment Evaluation Framework to assess the attractiveness of potential investment opportunities. The figure below illustrates this tool. It must be noted that this assessment was not determined from any particular index or quantitative measure of feasibility and impact; the graph merely serves as a visual guide and conceptual framework when evaluating one investment against other.

Figure 1: Investment Evaluation Framework



As such, investments were classified according to two criteria: **impact** and **feasibility**. For instance, an investment was catalogued as “high” if it had high scores in both impact and feasibility, whereas

“medium” investments scored relatively lower on the composite measures. If an investment was considered highly feasible, yet scored “low” in its potential impact on the development of the country, it was placed in the “low” region. The same principle was followed if the industry scored “high” in impact and “low” in feasibility. The difficulty in comparing different industries, coupled with a dearth of quantitative data, necessitated that this evaluation be qualitative in nature. This is also reflected by the fact that not all factors under feasibility and impact had significant information to be included for all industries.

The **Feasibility** component of the framework is comprised of the following factors:

Demand Factors

- Excess demand - Does demand for the good exceed the available supply?
- Demand trend - What does future demand look like?
- Price sensitivity - How will changes in the price of the good affect demand?

Supply Factors

- Technological requirement - Does the technology for the production of the good exist locally or must it be imported? At what cost?
- Supply of qualified labor - Is the available labor qualified for the process? Is training required?
- Competitive production cost - Can the good be produced at a competitive cost for the local market? International market?
- Industry structure - How many firms operate in the sector? How will this affect operations?
- Price sensitivity - How will changes in the price of inputs affect production?
- Access to financing - How will access, or the lack thereof, to financing affect operations?

Enabling Environment

- Taxes - What are the taxes like for companies in this sector/industry?
- Tariffs - How will high trade tariffs affect imports of raw materials and exports of finished goods?
- Subsidies - Are there currently any subsidies in this sector/industry that might distort the market?
- Trade agreements - Are there any trade agreements that might benefit this sector/industry? How?
- Domestic policy - Are there any government policies facilitating investment in the sector/industry?
- Infrastructure - How does the existing infrastructure affect the viability of the sector/industry?

Profitability

- Payback period - What is the length of time required to recover the cost of an investment, calculated as Cost of Project/Annual Cash Inflow?
- Break-even analysis - What is the number of units that must be sold to produce a profit of zero and recover all associated costs?

The **Impact** component of the framework includes the following factors:

- Employment - How much employment will the investment generate?
- Technology transfer (skills) - Will this investment improve the skills of the labor force?
- Income – Which demographic segment will most benefit from the increase in wages derived from this investment?
- Local competitive environment - Does this investment spur competition locally and thus improve efficiency and productivity in the sector/industry?
- Linkages - Are there any backward or forward linkages that can be made with other industries? Are there any improvements in value chains?

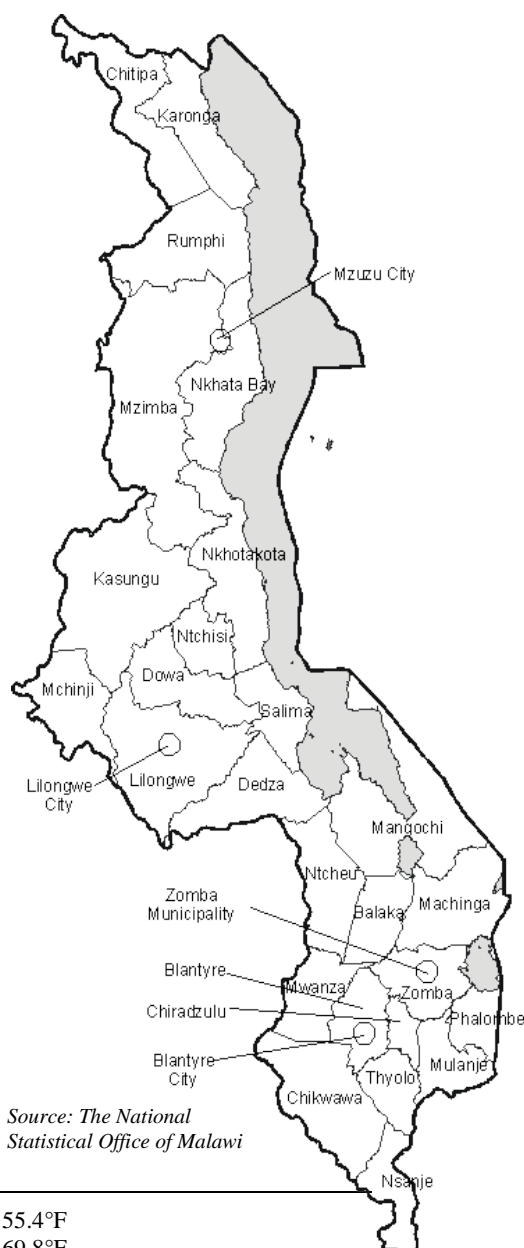
- Spillover effects - What effects will this investment have on other industries or sectors? Will any others benefit?
- Infrastructure - Will this investment lead to an improvement in the local infrastructure?
- Sustainability - What are the prospects of this investment's sustainability, environmental and otherwise?

II. Blantyre City Overview

Blantyre City Snapshot

Located in the south of Malawi, Blantyre lies on a central transport route and is connected to all parts of the country as well as several neighboring countries. For the purpose of this working paper, the Blantyre region covers the entire southern region except Mangochi and Zomba (see Figure 2). The following southern districts are included: Mwanza, Neno, Blantyre, Chiradzulu, Thyolo, Mulanje and Phalombe.

Figure 2: Map of Malawi



Source: The National
Statistical Office of Malawi

Climate/Rainfall

The city has a tropical continental climate, with light rainfall common during the cold dry season due to moist maritime air. Temperatures are cool, ranging from an average of 13°C³ in the cold season to 21°C⁴ during the hottest months, namely September, October and November. The average annual rainfall is 1,122 mm.⁵

Health

The threat of HIV/AIDS in the city is high with an HIV/AIDS prevalence rate of 21 percent in 2005. There is also a significant threat of cholera during annual rainfalls.⁶ Due to the poor drainage system, malaria remains a major health concern.⁷

Water

Water supply is accessible to 80 percent of the population. The total capacity of piped water is 86,000m³/day against a total demand of 63,100m³/day. The Blantyre Water Board has difficulty meeting current demand, especially during the dry season. Since Blantyre is located on a hill, the city's water supply must be pumped uphill through a pumping system that is old and susceptible to frequent breakdowns. These deficiencies, combined with the fact that old pipes lose up to 50 percent of water carried, make the city's water supply often unreliable and problematic for industries located in Blantyre.

Energy

The electricity grid covers almost the entire city. The local source of electricity is hydro-based, largely generated from the Shire River. Where service is available, there are frequent disruptions, with load

³ 55.4°F

⁴ 69.8°F

⁵ Blantyre City Assembly (2007). *Blantyre Urban Structure Plan: Volume 1, Background and Studies Report* (Blantyre: Blantyre City Assembly).

⁶ Blantyre City Assembly (August 2007). *City of Blantyre Situation Brief* (Blantyre: Blantyre City Assembly).

⁷ Blantyre City Assembly (2006). *Situation analysis of informal settlements — cities without slums initiative, Final Report* (Blantyre: Blantyre City Assembly).

shedding occurring regularly due to problems related to low water levels. In Malawi as a whole, only 2-5 percent of the population has access to electricity, and firewood is the primary source of energy for cooking for the majority of the population.⁸

Figure 3: Blantyre City Snapshot

City Area	Covers a total area of 22,800 hectares of hilly ground.
City Population (2007)	Estimated at 778,000, with a total country population of 13.2 million. ⁹ Blantyre is undergoing rapid population growth due to urbanization.
Employment	57.4% (Unemployed) 38% (Economically active) 10% (Informal) ¹⁰
Poverty	65% of households live below the poverty line. ¹¹ 46% of households earn less than MK4,000 per month (US\$50).
Life Expectancy	37 years (38 years for Malawi).
Literacy rate	26.9% with no education. 85.2% lack formal skills.

Source: Blantyre City Assembly (2006), "Situation Analysis of Informal Settlements."

Roads

The city's road network covers a distance of 344 miles, of which 35.5 percent is paved. The road system within the formally developed areas of Blantyre has adequate capacity to accommodate current volumes. However, given the City Assembly's lack of resources, the condition of the city's paved roads is poor. Despite deficiencies, Blantyre lies on a central transport route and is connected to all parts of the country as well as neighboring countries, including Mozambique and Zimbabwe.¹²

Blantyre City Economic Profile

Blantyre remains Malawi's commercial capital and largest city. The city has reasonably well-developed physical and social infrastructure, with access to all parts of Malawi and neighboring countries through road, rail, and air links. However, most essential services, especially water and power, have significant shortcomings, including low coverage level, poor maintenance and repair, frequent service disruption, and management problems.¹³

The primary sectors, including agriculture, fishing and mining, make up only a small portion of the Blantyre economy. While the manufacturing industry remains the most important employer in the city, wholesale and retail traders also make up a large part of the city's economy.¹⁴

Blantyre city does not have the authority and autonomy to offer local incentives to foreign investors. Therefore, unlike its competitors—large metropolitan areas in neighboring countries—investment incentives at the city level are almost non-existent. With no statutory authority for the city to act independently, it is unable to make contracts with foreign investors on its own, except for local incentives

⁸ Ibid.

⁹ Malawi Investment Promotion Agency (2007). *Investor's Guide to Malawi 2007*.

¹⁰ Blantyre City Assembly (2007). *Blantyre Urban Structure Plan: Volume 1, Background and Studies Report*, (Blantyre: Blantyre City Assembly).

¹¹ UN-HABITAT (September 2003). *Sustainable Cities Programme: Blantyre & Lilongwe*.
<http://ww2.unhabitat.org/programmes/sustainablecities/documents/lilongwe.pdf>.

¹² Blantyre City Assembly (2006). *Situation analysis of informal settlements — cities without slums initiative, Final Report* (Blantyre: Blantyre City Assembly).

¹³ Blantyre City Assembly (August 2007). *City of Blantyre Situation Brief*, (Blantyre: Blantyre City Assembly).

¹⁴ Blantyre City Assembly (2007). *Blantyre Urban Structure Plan: Volume 1, Background and Studies Report* (Blantyre: Blantyre City Assembly).

such as tax holidays or city land grants.¹⁵ Currently, applications for FDI in the city are centrally managed by government agencies, such as MIPA, whose branch is also located in Blantyre. Another challenge for Blantyre is poor coordination between key stakeholders, including municipal boards, governmental agencies and service providers, resulting in the under-utilization of scarce resources and uncoordinated planning.¹⁶ There is a need for the Blantyre City Assembly to establish formal communication channels with many of these stakeholders.

Blantyre City Political Profile

After three decades of one-party rule under President Hastings Banda, Malawi held multiparty elections in 1994. The current President, Bingu wa Mutharika, was elected in May 2004 after a failed attempt by the previous president to amend the constitution to permit another term. Since coming to power, President Mutharika has taken robust steps to crack down on state corruption. The administration's efforts to curtail corruption and government spending have contributed to building amicable relationships with international donors, who provide 80 percent of the country's development budget.¹⁷ Malawi is expected to hold Presidential and Parliamentary elections in May 2009. Former President Bakili Muluzi is expected to run for presidency.

As a part of the participatory democratic process, Blantyre had elected city councilors until 2004.¹⁸ The Blantyre City Assembly does not receive much funding from the Government and its only source of income is city taxes on property, imposition of which requires an approval from the Government.¹⁹

While decentralization has taken place in Blantyre in accordance with the Local Government Act of 1998, corruption and financial shortfalls continue to be major challenges for the city.²⁰

¹⁵ DLA Piper US LLP (November 2007). *Millennium Cities Initiative: Report on the Regulatory Framework for Foreign Direct Investment, Malawi*.

¹⁶ Ibid.

¹⁷ Freedom House (April 16, 2007). *Freedom in the World - Malawi (2007)*. <http://www.unhcr.org/cgi-bin/texis/vtx/refworld/rwmain?docid=473c55dcc>.

¹⁸ Blantyre City Assembly (August 2007). *City of Blantyre Situation Brief* (Blantyre: Blantyre City Assembly).

¹⁹ Costly Chanza, Blantyre City Assembly (January 9, 2008). Personal interview.

²⁰ Tambulasi, Richard I.C. and Happy M. Kayuni (2007). "Opening a New Window for Corruption: An Accountability Assessment of Malawi's Four Years of Democratic Local Governance," *Journal of Asian and African Studies* vol. 42 (2).

III. Industry Assessments

1. Cotton and Textiles Industry Analysis

Industry Overview

The 1950's were a successful decade for the cotton sub-sector in Malawi. During the decade, state-controlled prices set by the country's sole textile manufacturer, the parastatal David Whitehead & Sons (DW&S), along with strong international demand, contributed to a peak production of 100,000 tons of cotton per year.²¹ The following decades witnessed the decline of the industry from its peak levels in the 1950's to a mere 14,700 tons by 2002-2003.²² While the privatization and subsequent near collapse of DW&S was a key factor in this decline, many other factors such as increasing competition from Asian counterparts, growing trade liberalization, dumping of secondhand clothing, declining farmer productivity, and chronic underinvestment played major roles as well. Only in recent years has the cotton sub-sector begun to rebound with the help of rising international demand and a successful lending initiative led by two gingers, resulting in current production of approximately 58,569 tons in 2006.²³

Figure 4: Exports to the United States²⁴

	US\$ (thousands)	2005	2006	2007
Malawi				
Textiles and Apparel:				
Exports to US		22,781	18,187	19,830
Total through AGOA		22,648	18,187	19,830
All Sectors:				
Exports to US		82,444	79,010	69,007
Total through AGOA		65,902	60,908	59,309
Swaziland				
Textiles and Apparel:				
Exports to US		160,987	135,204	135,296
Total through AGOA		159,367	134,423	134,635
All Sectors:				
Exports to US		198,876	155,807	147,963
Total through AGOA		176,117	149,815	141,410
Lesotho				
Textiles and Apparel:				
Exports to US		390,690	387,242	383,566
Total through AGOA		388,452	384,452	379,616
All Sectors:				
Exports to US		403,471	79,010	443,018
Total through AGOA		388,584	60,908	379,617

Source: U.S Department of Commerce.

The post-privatization struggles of DW&S, which was acquired by Mapeto Wholesalers in 2003 and renamed Mapeto (DWSM) Ltd., led to a disintegration of the entire cotton-textiles-garment value chain, which persists to this day. Due in large part to this fragmentation, Malawi has not been able to attract

²¹ K.K. Desai, Knitwear Industries (January 14, 2008). Personal interview.

²² Coyne, Sarah (September 2004). *Cotton Sub-Sector Draft Report* (Blantyre: Kadale Consultants).

²³ Estimates from the Malawi Investment Guide and sub-sector stakeholders suggest that production numbers were actually closer to 46,000 tons; See Ministry of Agriculture and Food Security Annual Agricultural Statistical Bulletin 2006/07.

²⁴ "All Sectors" include textiles and apparel.

much investment into the textile and garment sub-sectors and lags behind its regional competitors, namely Swaziland and Lesotho. While textile and garment production in these two southern countries was less than that of Malawi fifteen years ago, both Swaziland and Lesotho now export well above Malawi's totals, due largely to strong investment (see Figure 4).²⁵ A revitalized textile sector would stimulate cotton production, generate employment, and supply much-needed cloth for garment makers. The textile segment of the value chain, in particular, is in dire need of an investment infusion. This point is of special significance, considering that Malawi currently enjoys preferred access to the US market through AGOA. For Malawi to continue reaping the benefits of this agreement, it will need to source its fabric locally or regionally, instead of relying on cheap fabric from East Asia before the provision to source textiles materials from non-AGOA countries expires in 2012.²⁶

Value Chain Analysis

In Malawi, the disintegration of the textile production sub-sector has led to a gap in the value chain which can be described as follows:²⁷

1. **Cotton production value chain:** comprised of cotton-growing farmers and ginneries, in which seed cotton is separated into lint (37 percent) and cottonseed (58 percent).²⁸ While over 95 percent of the lint is exported to other countries for spinning—typically the ginning company's home country—the majority of the cottonseed is processed locally into oil for domestic consumers, with animal feed as a by-product.²⁹ The four ginneries that currently operate in Malawi are Great Lakes Cotton Company (Great Lakes), Cargill (formerly Clark Cotton Malawi), Iponga, and a new entrant, Toleza.
2. **Textile manufacturing value chain:** consists of the country's sole textile manufacturer, Mapeto, that spins less than 5% of the country's lint into yarn, which is then exported or weaved into loom cloth before either being exported or sold to the local consumer market.
3. **Domestic garment manufacturing value chain:** comprised of several firms that sell to the domestic market. They buy a very small proportion of their cloth from Mapeto DW&S.
4. **Export garment manufacturing value chain:** comprised of several large firms specially designated as Export Processing Zones. They import all of their material for production, since Malawi does not currently produce the right quality of cloth.

Sub-sector Analysis: Cotton/Textiles/Garments

Cotton ranks as the fourth most important export crop in Malawi – behind tobacco, tea and sugar – supporting more than 120,000 rural households and grown on a reported 60,688 hectares of land.³⁰ While the Blantyre area is responsible for only a small proportion of the country's yield (see Figure 5), it lays in close proximity to the Shire Valley, which accounts for nearly half of the country's production.

²⁵ Currently, Lesotho is Africa's biggest exporter of garments to the United States.

²⁶ This is the so-called "Double Transformation" requisite in AGOA. The agreement stipulates that by 2012, the cotton must undergo two transformations in the country of origin. For example, yarn could be woven into fabric (first transformation) and then made into a garment (second transformation) to satisfy the requirement.

²⁷ The Privatization Commission. <http://www.privatisationmalawi.org/>.

²⁸ Assuming losses of around 5%.

²⁹ Agar, Jason (September 2007). *Credit Demand and Supply, Cotton Sector, Malawi* (Blantyre: Kadale Consultants).

³⁰ Ibid.

Figure 5: Cotton Hectarage and Production (2006-2007 Estimates)

Cotton	Hectares (ha)	Production (tons)
Mzuzu	46	29
Karonga	1,777	1,689
Kasungu	1,917	1,745
Blantyre	2,042	2,211
Lilongwe	3,707	3,705
Salima	6,872	6,692
Machinga	18,217	15,570
Shire Valley	26,090	30,181
National	60,673	63,290

Source: Ministry of Agriculture and Food Security.

The recent growth of the cotton sector, as seen in Figure 6 has been largely due to the lending and input subsidy initiatives first implemented with the creation of the Cotton Development Association (CDA) in 2002-2003. The CDA, a consortium of the country's key stakeholders in the cotton industry, was spearheaded by the two major cotton ginners—Great Lakes and Cargill—to spur local production. Despite having received the backing of the Government of Malawi, this association is insufficient in that it is no substitute for a National Cotton Council, which has the ability to regulate the industry as a whole and represent all of its key players. The current Cotton Act in Malawi is outdated, and there was a movement to revise it to include the establishment of the Cotton Council, which would oversee proper planning, research & extension, quality and marketing under a multi-sector approach (the initiative was originally led by the private sector), and to be financed by the levy. However, the Government has yet to approve the proposal.³¹

Figure 6: Malawi's Main Exports by Value (2000-2006)

MK (millions)	2000	2001	2002	2003	2004	2005	2006
Tobacco	14,200.3	18,363.3	17,893.1	24,191.2	22,303.5	31,241.5	55,840.0
Tea	2,235.4	2,461.0	2,827.8	3,481.5	5,132.5	5,937.4	6,737.0
Sugar	2,339.2	3,975.7	2,684.2	10,571.4	7,881.4	5,408.5	6,391.0
Apparel/Garments	797.8	2,018.0	2,464.6	3,858.1	4,795.5	4,995.7	5,525.0
Cotton	438.5	316.6	260.8	483.9	2,224.3	1,847.1	2,054.0
Nuts	239.7	368.2	378.1	1,132.0	1,581.0	1,473.0	1,003.0

Source: NSO/ 2007 Economic Report.

The two major cotton ginners—Great Lakes and Cargill—are headquartered in Blantyre and are subsidiaries of multinationals. Great Lakes' parent company is the UK-based Plexus Cotton Limited, a vertically integrated raw cotton supplier, and Cargill is a subsidiary of Cargill, Inc., an American global provider of food, agricultural and risk management products and services. Both companies supply most of their lint to their parent companies. Iponga was the only other ginner operating in the country until Toleza from Balaka started its operation in 2008. Despite the recent upward trend of production, the cotton ginneries regularly operate at roughly 30 percent of capacity.³² Furthermore, given the fact that each gin has a capacity of approximately 20,000 tons/year, the country as a whole is capable of producing well over 100,000 tons.³³ Hence, there is room for a significant increase in smallholder cotton production without the need for additional capital investment on behalf of the ginners.

³¹ Duncan Warren, NASFAM (March 12, 2008). Personal interview.

³² Pieter Verster, Great Lakes Cotton Company (January 16, 2008). Personal interview.

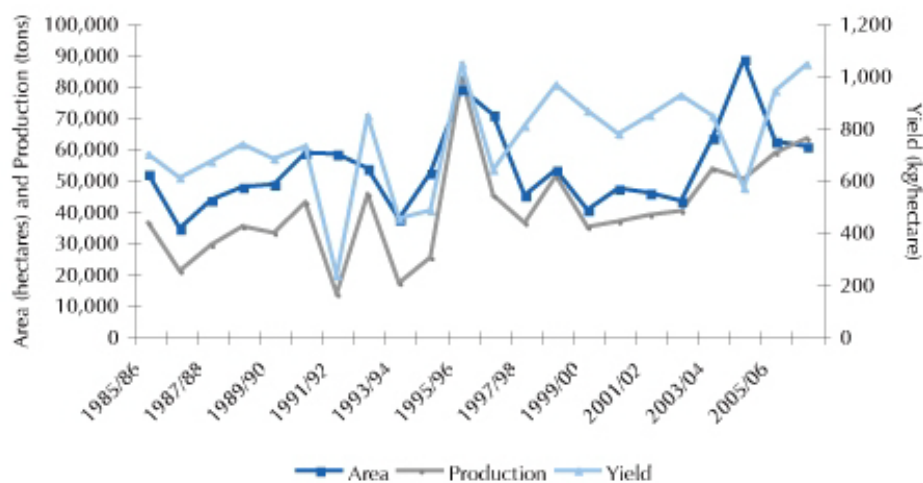
³³ Ibid.

Textiles

All textile production in the country is manufactured by Mapeto, a former parastatal located in Blantyre city. Plagued by severe financial difficulties (e.g. yarn production fell from 30 million meters in the early 1980's to 100 thousand meters by 2002), the company was forced into receivership in 2002, only to resume operations in 2003.³⁴ The disruption of the domestic market as a result of severe dumping and smuggling of finished textile goods played a key role in the company's struggles.

Currently, the spinning operations of Mapeto buy up less than 5 percent (1,000-1,500 tons per annum) of the country's domestically produced lint.³⁵ Furthermore, only a very small percentage of its yarn and cloth production is purchased by the country's domestic-oriented garment makers, with the rest being exported or sold directly to the consumer market. Since the company does not produce higher quality fabrics required by international standards, it does not supply the country's garment exporters.

Figure 7: Cotton Area, Yield, and Production Trends (1985 – 2007)



Source: Ministry of Agriculture and Food Security.

Garments

The garment industry in Malawi is relatively small, consisting of approximately 8 major companies, most of which are located in Blantyre. The garment industry is divided into EPZ-designated exporters and local-market suppliers. Domestic-oriented garment producers mostly import their fabric (a minimal amount is bought from Mapeto) and supply a market that is flooded with imported secondhand clothing—a by-product of increased liberalization. As incomes in Malawi are generally low, locals generally prefer the cheaper secondhand clothing, making this a difficult market to enter. Some of these garment producers export regionally, but do not account for much of the overall production.

Garment exporters generally source most of their fabric from India, Taiwan, and China, as regional fabric is not regarded as being of sufficient quality. At the moment, exports are destined mostly for South Africa, with an increasing amount being shipped to the US through the AGOA agreement. These firms are not allowed to supply the domestic market given EPZ regulations.

Once again, the data in Figure 4 for Lesotho and Swaziland underscore the growth potential of the garment industry in Malawi. The textile exports of all three countries as a share of the overall totals also further highlight the unique opportunities presented by AGOA for garment exporting.

³⁴ The Regional Trade Center (RATES) (July 2003). *Cotton-Textile-Apparel Value Chain Report Malawi*. (Nairobi: RATES).

³⁵ Agar, Jason (September 2007). *Credit Demand and Supply, Cotton Sector, Malawi* (Blantyre: Kadale Consultants).

Opportunities

The textile production value-chain is of paramount importance to the sustainability and future of Malawi's garment industry. At the moment, Malawi is taking advantage of its privileged position in international garment trading enabled by AGOA's duty-free access to the US market. However, as soon as the region's safeguards are removed and AGOA's sourcing requirements become stiffer, the country will find itself on the same playing field as India and East Asia, which may signal the end of the Malawian garment industry's competitive advantage.³⁶ To prevent this from occurring, it is necessary that the country revitalize its textile industry and reconnect the separate sectors into a vertically integrated value-chain spanning cotton production, spinning, weaving, knitting, and garment production.

Currently, the garment manufacturers—exporters and local producers—must rely on imported cloth for the majority of their raw material needs. This represents additional transaction costs and turnaround time that undermine the reliability, efficiency, and competitiveness of the sector. Garment producers, relying on relatively low labor costs and minimal capital investment, could easily absorb a higher domestic supply of yarn and fabric, which would allow them to increase their supply to international markets.³⁷

As previously mentioned, Mapeto is currently the country's sole textile producer, spinning less than 5 percent of the country's lint. However, it is looking to expand its operations and has said that it would welcome investment, as it already has some capital investments planned for the upcoming years to increase its capacity.³⁸ This represents a unique opportunity for investment in a company that already has industry expertise at a time when Malawi enjoys preferential access to international markets. It has been projected that on-site expansion of operations, encompassing a significant expansion of AGOA-quality weaving capabilities, would take a minimum of two to three years to achieve.³⁹ Funding will be necessary for Mapeto to purchase about 100 looms valued at approximately US\$500,000 each, suggesting a total investment size of US\$50 million.⁴⁰ If its production capabilities are enhanced through investment, Mapeto can enjoy privileged access to the Malawian market of garment producers, and also access to the regional market, which is subject to the same sourcing requirements.

Another alternative is setting up a new installation encompassing a vertically-integrated textile-manufacturing operation. This represents, however, a costlier investment than the existing on-site expansion and has a longer time frame, which may preclude the company from achieving full operating and AGOA-compliant status before the 2012 deadline. Nonetheless, this type of investment is important for the long-term growth and sustainability of the industry.

The Government of Malawi has been somewhat slow to support the industry, but things have begun to change as the Ministry of Agriculture and Food Security requested a budget of MK 150 million⁴¹ for the 2007-2008 growing season to provide input subsidies for cotton growers.⁴² The Government is aware of the need to ramp up cotton production with a view to creating adequate supply for the value-adding components of the value chain, i.e. textiles and garments. In line with this initiative, cotton has been listed as a priority sector in the Malawi Growth and Development Strategy (MGDS).⁴³

³⁶ The local/regional sourcing requirement is set to come into effect in 2012.

³⁷ K.K. Desai, Knitwear Industries (January 14, 2008). Personal interview.

³⁸ Ibid.

³⁹ Cockcroft, John (2003). *Regional Market Assessment on Lint and Textiles* (Nairobi: The RATES Center).

⁴⁰ Martin Mpata, Mapeto DW&S (January 17, 2008). Personal Interview.

⁴¹ US\$1.09 million

⁴² K.K. Desai, Knitwear Industries (January 14, 2008). Personal interview.

⁴³ Agar, Jason (September 2007). *Credit Demand and Supply, Cotton Sector, Malawi* (Blantyre: Kadale Consultants).

Constraints

The Malawian textile industry currently suffers from chronic underinvestment that has resulted in the disaggregation of the cotton-textile-garment value-chain. Major constraints are as follows:

Lack of a Cotton Council

The failure of the Government to update the Cotton Act to include the creation of a Cotton Council with the ability to regulate and reintegrate the industry along the value chain, has led to incoherent policy that does not align incentives for all stakeholders. For example, in an effort to help poor farmers, in 2008 the Government established a minimum price for cotton of MK 65/kg,⁴⁴ compared to MK 40/kg⁴⁵ for 2007.⁴⁶ This significant increase in the floor price, however, has come at the expense of the ginners, who are currently re-evaluating their operations and assessing their cost structures to see if they can remain profitable. In Zambia, for example, cotton was priced at ZK1,125⁴⁷ per kg in 2007, after the Government increased the floor price by 32 percent.⁴⁸

Cost of Investment

The machinery and capital investments required in textile manufacturing are high-value investments requiring access to capital, which is not easily available in Malawi. This is partly responsible for the dearth of investment in the industry today.

Access to Financing

The prohibitive rate of local borrowing for investment, which is currently 24 percent,⁴⁹ makes it difficult for industrial participants to make capital investments to replace or maintain existing machinery, affecting production quality, efficiency and capacity. Furthermore, at the smallholder level, limited access to financing has forced the ginners to become lending institutions, which has resulted in increased costs.

Value Chain Gap

There is currently a breakdown in the supply chain with the ginners exporting lint, which forces Mapeto to import much of this input, instead of using local supply.⁵⁰ A potential investment in Mapeto or in a new textile production facility would increase the capacity of this industry and fill in the value chain gap by creating the demand necessary to absorb a large enough supply of lint, so that it is profitable for cotton ginners to supply to local industry.

Supply-Side Constraints

About 60,000 tons of cotton was produced nationally in 2006. While this represents an increase from previous years, it still is not enough to meet the ginners' combined available capacity of over 100,000 tons. Despite the efforts of the CDA and the ginners to increase production, all ginners continue to produce under capacity. Significant development of textile manufacturing will increase the demand for lint, which should optimally be supplied by the local ginners.

Competition from International Imports

The local market is flooded with cheaper secondhand fabrics that displace the demand for garments supplied by domestic-oriented garment producers. As a result, any investment in textile manufacturing should be geared towards making fabrics for the international market, with special attention to meeting AGOA standards.

⁴⁴ US\$0.47/kg.

⁴⁵ US\$0.29/kg.

⁴⁶ Pieter Verster, Great Lakes Cotton Company (January 16, 2008). Personal interview.

⁴⁷ US\$0.28/kg.

⁴⁸ Fibre 2 Fashion (May 18, 2007). "Zambia: Cotton farmers cheer floor price rise."

⁴⁹ IMF projection for 2008.

⁵⁰ Martin Mpata, Mapeto DW&S (January 17, 2008). Personal Interview.

Impact and Feasibility Assessment

Impact

Employment

A revitalized textile-manufacturing sector would generate employment at the plant level. Until 1993, DW&S relied on over 4,000 employees, and after privatization in 2003, Mapeto expected to invest over US\$10 million in the rehabilitation of the plant, creating 3,500 jobs over a 5-year period.⁵¹ Furthermore, increased demand for cotton from the textile-manufacturing sector has the potential to increase labor demand at the farm and garment production levels, where cheaper raw materials can facilitate expansion.

Linkages (Backward and Forward)

A healthy textile-manufacturing sector is the missing link to a vertically integrated cotton-spinning-garment value chain. This will have an impact on the other sectors of the chain through their responses to demand and supply factors.

Feasibility

Demand Factors

Currently, Mapeto supplies a negligible amount of cloth to domestically-oriented garment producers and none to the exporting garment producers. Consequently, local garment companies are forced to source their fabrics from outside the region. Key stakeholders in the garment industry have pointed to the fact that a robust local textile-manufacturing sub-sector would be able to supply the entire garment industry.⁵² Furthermore, the large international demand for garments and preferential access to regional/international markets (especially in the United States) signals an opportunity for the growth of local textile manufacturing.

Supply Factors

Cotton processors are currently ginning 46,000 tons of lint per annum, of which only 1,000 – 1,500 tons per annum is being spun by the domestic textile-manufacturing sub-sector. Even without considering any trends in cotton production, this shortfall is indicative of the amount of lint a revitalized textile-manufacturing sector would be able to absorb from local cotton ginners.

Enabling Environment

While a revision of the Cotton Act is necessary, especially as it relates to the establishment of a Cotton Council, Malawi has specifically designated cotton as a priority sector. The MGDS addresses the importance of this industry as well.⁵³

2. Cassava Industry Analysis

Industry Overview

Cassava is an essential part of the diet of more than half a billion people. It is the third largest source of carbohydrates for human food in the world; its roots are high in calories, and the leaves are a good source of protein and vitamins A and B.⁵⁴ Food use represents more than half of total cassava consumption, consisting largely of fresh cassava and processed flour.⁵⁵ However, the commercial possibilities of

⁵¹ Fekete, Paul et al (2004). *Malawi: Integrated Framework Diagnostic Trade Integration Study* (Geneva: Integrated Framework Working Group).; Also see the privatization Commission.

⁵² K.K. Desai, Knitwear Industries (January 14, 2008). Personal interview.

⁵³ Agar, Jason (September 2007). *Credit Demand and Supply, Cotton Sector, Malawi* (Blantyre: Kadale Consultants).

⁵⁴ Fauquet, Claude and Denis Fargette (1990). "African Cassava Mosaic Virus: Etiology, Epidemiology, and Control," *Plant Disease* 74/6 (June).

⁵⁵ Susila, Wayan R. (2003). "Good Prospects For Cassava Development," *CGPRT Flash* 1/2 (September).

industrial cassava products are increasingly receiving attention given its potential for export. Since the 19th century, cassava has extended rapidly across Africa. Consequently, it is now the largest center of cassava production.⁵⁶

Global Market Landscape

Approximately 70 percent of world cassava production is concentrated in five countries—Nigeria, Brazil, Thailand, Indonesia, and the Democratic Republic of Congo.⁵⁷ While mainly grown in Brazil and Thailand as an industrial crop for export purposes, cassava in Africa is used primarily for local consumption.⁵⁸ Cassava production has been growing steadily. In 1983, world cassava production was about 131 million tons. In 1999, global cassava production reached over 160 million tons and by 2005, production had reached approximately 210 million tons.⁵⁹

Figure 8: Global Cassava Production

Region	1983–1985 Average			1993–1995 Average			2005 Projection		
	Area '000 ha	Yield kg/ha	Production '000 ha	Area '000 ha	Yield kg/ha	Production '000 ha	Area '000 ha	Yield kg/ha	Production '000 ha
World	13,855	9,5	131,424	16,540	9,9	163,746	18,595	11,2	207,556
Africa	7,518	7,3	55,207	10,158	8,2	83,062	11,961	9,5	114,202
Latin America & Caribbean	2,592	11,1	28,690	2,593	11,9	30,804	2,777	12,8	35,590
Asia	3,730	12,7	47,371	3,775	13,2	49,740	3,836	15,0	57,572
Oceania	14	11,0	156	13	10,4	139	21	9,3	193

Source: *The World Cassava Economy*, FAO.

Production in Malawi and Blantyre

Cassava production in Malawi has experienced a dramatic surge over the past decade, in all regions of the country. Cassava is the staple food crop for 30 percent of Malawi's population, particularly for the households along the Lake Shore Districts of Nkhata Bay, Nkhota-Kota, Rumphi and Karonga in the Northern region. It is grown in other parts of Malawi as a complement to maize and for use during critical food shortage periods (between October and March).⁶⁰ The emergence of an urban fast food market enabled by high population densities and increasing maize prices has also resulted in increased consumption in central Malawi. Food security concerns have played a larger role in the growth of cassava in southern Malawi. Cassava's expansion in central and southern Malawi has occurred primarily at the expense of maize and tobacco; in the northern regions, which are less densely populated, cassava has expanded onto new agricultural land.⁶¹

⁵⁶ Fauquet, Claude and Denis Fargette (1990). "African Cassava Mosaic Virus: Etiology, Epidemiology, and Control," *Plant Disease* 74/6 (June).

⁵⁷ FAO. "World Cassava Situation and Recent Trends," *The World Cassava Economy*.

⁵⁸ Fauquet, Claude and Denis Fargette (1990). "African Cassava Mosaic Virus: Etiology, Epidemiology, and Control," *Plant Disease* 74/6 (June).

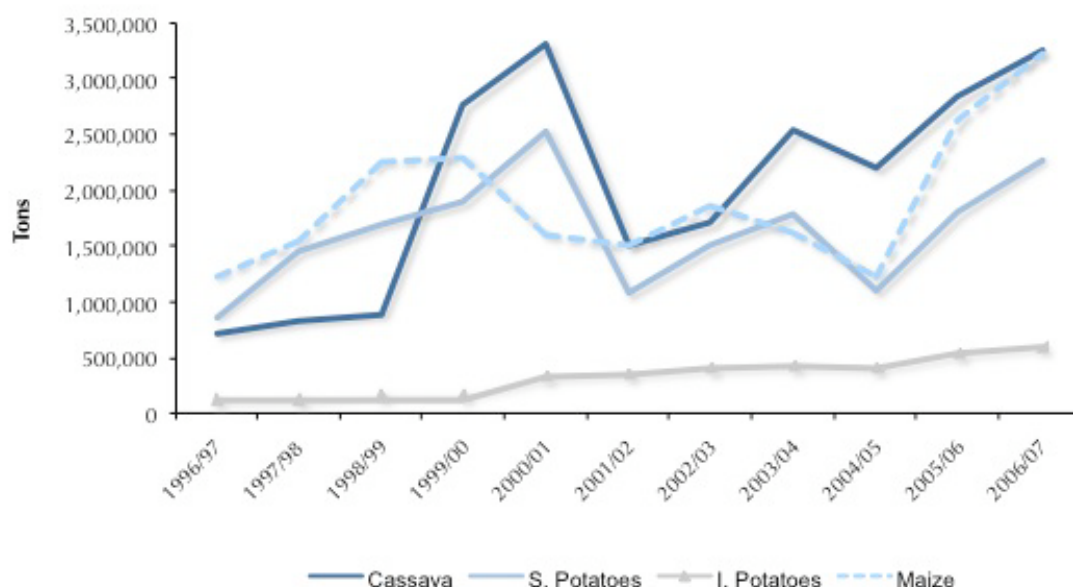
⁵⁹ FAO. "World Cassava Situation and Recent Trends," *The World Cassava Economy*. See also "Championing the cause of cassava," <http://www.fao.org/NEWS/2000/000405e.htm>.

⁶⁰ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

⁶¹ Haggblade, Steven and Ballard Zulu (December 1-3). "The Recent Cassava Surge in Zambia and Malawi," *InWent, IFPRI, NEPAD, CTA Successes in African Agriculture Conference*.

According to the 2006 – 2007 Annual Agricultural Statistical Bulletin, Malawi produced 3,238,943 tons of cassava in 2006-2007 compared to 713,876 tons 10 years earlier, representing a compounded annual growth rate of 16.3 percent. In the same period, maize production grew by 10.2 percent per annum. Assuming that world cassava production remained at the projected 2005 level, Malawi's production represents a miniscule 1.56 percent of world production. The Blantyre urban area grows about 0.5 percent of total cassava production. In 2006 – 2007, Blantyre produced approximately 16,925 tons of cassava.⁶²

Figure 9: Cassava Production in Comparison to Other Crops in Malawi



Source: Malawi Ministry of Agriculture and Food Security.

A number of supply and demand factors can account for the recent surge in cassava production in Malawi since the mid 1990s:⁶³

1. The dismantling of large maize subsidy systems at the end of the 1980s. The resultant increase in input costs and declining profitability caused farmers to cut back on maize production. Prices of raw roots in urban markets are lower than maize.
2. Improved varieties of cassava that have roughly doubled cassava yields. With the same labor and land without purchased inputs, improved varieties have resulted in increased output.
3. The Malawian drought of 1991 – 1992 cut maize yields dramatically and precipitated an interest in more drought-resistant crops. Consequently, cassava gathered importance at the policy table and government investment in cassava cultivation increased.
4. Arguably, a shrinking labor force due to the high HIV prevalence rates in Malawi has caused a shift favoring cultivation of cassava, a crop known for its ease of cultivation.
5. Demographic and migration trends causing a growth of urban areas combined with a collapse of urban incomes due to HIV-related decreases in life expectancy have fueled demand for cassava as an affordable snack food.

⁶² Ministry of Agriculture and Food Security (2007). *2006/07 Annual Agricultural Statistical Bulletin* (Lilongwe: Government of Malawi).

⁶³ Haggblade, Steven and Ballard Zulu (December 1-3). "The Recent Cassava Surge in Zambia and Malawi", *InWEnt, IFPRI, NEPAD, CTA Successes in African Agriculture Conference*. See also FAO, "Global cassava market study business opportunities for the use of cassava," (2004).

Value Chain Analysis

Production

Cassava does not require chemical fertilizers, and it can grow under serious moisture stress as well as in marginal soils without a significant drop in yields.⁶⁴ Further, cassava is known for its ease of cultivation since it does not require many inputs or extensive labor.

In Malawi, small farms dominate cassava production. Smallholder farmers grow cassava on small plots in mixed stands with other food crops such as cowpeas, maize and sweet potato, particularly among households in the southern region where land is a major production constraint. A small number of farmers have begun to commercialize cassava production. However, most production is still un-mechanized by smallholder farmers: farm plots under half a hectare account for 79 percent of the cultivated cassava crop area in Malawi, while farm plots under one hectare account for 96 percent of all crop area in Malawi. Thus, there is virtually no commercial production of cassava in the country.⁶⁵

Processing

Cassava is a versatile crop that can be processed into a number of products. Cassava can be processed into food products for household consumption, pellets for animal feed, and starch-based products that have various industrial applications.

Food Products

The processing of the root adds value by removing toxins and reducing the water content, which reduces the weight, thereby facilitating transportation and extending the product's shelf life. Upon detoxification and processing, the root can be processed into chips or flour for human consumption.⁶⁶

Raw cassava roots and leaves are fit for human consumption. The root is a rich source of carbohydrates, while the leaves provide proteins and minerals. Cassava roots have a very high water content—typically around 70 percent. Cassava roots contain a naturally-occurring toxin—cyanohydrin, a derivative of cyanide—that lends a bitter taste to the root. However, the toxin can be removed by peeling, grating, or squeezing the root.⁶⁷

Industrial Products

The cassava root can be processed into starch that has a wide variety of uses. Different varieties of starches and starch-based products can be manufactured for industrial uses and can be enhanced through simple value-addition techniques or highly complex chemical transformations. Starches subject to complex value-addition techniques are called “modified starches” and unmodified starches are called “native starches.”⁶⁸

The native and modified starches can be used for a wide variety of purposes:

- **Thickening agent:** Cassava flour is mainly used in bakery products and cassava starch can be used as a general thickening agent. Modified cassava starch or starch derivatives have been used

⁶⁴ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

⁶⁵ Haggblade, Steven and Ballard Zulu (December 1-3). "The Recent Cassava Surge in Zambia and Malawi," *InWEnt, IFPRI, NEPAD, CTA Successes in African Agriculture Conference*.

⁶⁶ FAO. "World Cassava Situation and Recent Trends," *The World Cassava Economy*.

⁶⁷ Ibid.

⁶⁸ Ibid.

for thickening, binding, texturing, and stabilizing a range of food products such as canned foods, frozen foods, salad dressings, sauces, and infant foods.

- **Glue:** Cassava starch is a very important raw material in making glue. Cassava starch-based dextrates are excellent adhesives and are used in many applications including pre-gummed papers, tapes, labels, stamps, and envelopes.
- **Confectionary:** Modified cassava starch or starch derivatives are used in confectionery for different purposes such as thickening and glazing. Cassava starches are widely used in sweets such as jellies and gums.
- **Pharmaceuticals:** Native and modified cassava starches are used as binders, fillers, and disintegrating agents for tablet production.
- **Sweeteners:** Glucose and fructose made from cassava starch are used as substitutes for sucrose in jams and canned fruits. Cassava-based sweeteners are preferred in beverage formulations for their improved processing characteristics and product-enhancing properties.
- **Plywood:** Glue made from cassava starch is a key material in plywood manufacturing.
- **Paper:** Modified cassava starch is used in the wet stage of paper making to flocculate the pulp, improving the run rate and reducing pulp loss. Native and modified cassava starches are also used in the coding and sizing of paper.
- **Textiles:** Cassava starch is used in three stages of textile processing: sizing the yarn to stiffen and protect it during weaving, improving color consistency during printing, and making the fabric durable and shining at finishing.

Sub-Sector Analysis: Cassava Processing

In Malawi, cassava is produced primarily for food consumption; commercial production of starch-based value-added products is virtually absent in the country.

Opportunities

The robust market for value-added products that can be manufactured as a result of the commercial production and processing of cassava creates numerous opportunities for investment in this sub-sector. Further, given Malawi's production trend of surging output and the infancy of its commercial cassava-production industry, numerous business opportunities exist involving domestic and export markets. Investment opportunities exist in the following segments of the cassava processing value-chain:

1. Food Products

Cassava can be used as an import substitution crop to replace wheat flour. As a result, there is potential for further growth in cassava production provided prices of wheat flour rise relative to cassava flour. A study by the Food and Agriculture Organization (FAO) projected that a 10 percent substitute for imported wheat and wheat flour will translate into a growth potential of 11,926 tons of cassava in Malawi—a 6.28 percent production increase over 1995.⁶⁹ Hence, a sizeable opportunity exists to set up a cassava flour processing facility.

2. Industrial Products

Starch is a multibillion-dollar business worldwide with applications in several industries. There are more importers than exporters in the world market for cassava starch. Consequently, opportunities exist for Malawi to develop a starch manufacturing industry with a view to exporting to regional markets and beyond. Demand for starch products is strong in European, North American, and Asian markets.

⁶⁹ FAO and IFAD (2004). "Global cassava market study: Business opportunities for the use of cassava," *Proceedings of the Validation Forum on the Global Cassava Development Strategy* 6.

Interviews conducted estimated that an initial investment of US\$1 - US\$2 million is required for setting up a starch production plant. Such a production plant would produce about 3 tons of starch per hour. Malawi produces virtually no starch currently even though some experts conducting research estimate the local demand to be 3,000 tons.⁷⁰

Constraints

Perishability

Cassava roots have a shelf life of 24–48 hours after harvest, and fresh roots must be processed within 2 to 3 days from the moment of harvest. Cassava is also highly susceptible to microbial contamination due to poor handling, humid climate, lack of proper drying, and the long transit time from the field to markets.⁷¹

Pest Control

Pest and disease pressures from the cassava mosaic virus (CMV), cassava mealybug and cassava green spider mite, lower yields. Losses in tuber yield due to diseases can be as high as 90 percent, making the need to protect cassava against diseases one of the most crucial aspects of producing high-quality cassava.⁷²

Market Size and Access

It is known that cassava starch is a versatile material that competes well with maize, wheat and sweet potato starches, with high export potential. However, it should be noted that many markets are not completely open in nature (e.g. European Community) and that price competition is fierce.⁷³

Supply-Side Constraints

The disjointed structure of supply, consisting of many smallholder farmers, can be an obstacle for commercialization of cassava production for starch and flour. Associations such as the Southern Africa Root Crops Research Network (SARRNET) and the National Smallholder Farmers' Association of Malawi (NASFAM) will play an important market linkage and information transfer role.

Quality Control

There is significant demand for improved grades and standards for cassava, particularly for industrial uses, and there is potential for price premiums for high quality processed cassava starch and cassava flour. However, most cassava varieties grown in Malawi cannot meet the FAO food safety standard measured by the level of cyanogens. Even with increased investment in plant breeding or post-harvest technologies, such a minimum level may not be attained. As such, quality standards may hinder the increased export of cassava as edible products.⁷⁴

Impact and Feasibility Assessment

Feasibility

Demand Factors

An FAO study of global cassava demand noted that growing urbanization offers opportunities to develop markets for cassava. Opportunities to increase consumption are dependent on the consumption of cassava

⁷⁰ Vito Sandifolo, International Institute of Tropical Agriculture (March 19, 2008). Personal interview.

⁷¹ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

⁷² Ibid.

⁷³ FAO and IFAD (2004). "Global cassava market study: Business opportunities for the use of cassava," *Proceedings of the Validation Forum on the Global Cassava Development Strategy* 6.

⁷⁴ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

by urban residents and a distribution system linking consumers to producers. Moreover, the realization of increased cassava consumption depends on the availability of improved infrastructure, better handling and storage technologies, etc. As noted in the FAO case study, given the increased demand for cassava chips and pellets, and cassava starch in non-producing countries, the potential for cassava growth in producing countries is substantial.⁷⁵

Supply Factors

In Malawi, cassava is primarily grown by smallholder farmers who are not necessarily organized. In addition, another major factor affecting increased production and quality of cassava is the scarcity of planting materials. Local cassava varieties are small in size (often preferred for ease of transport to markets) and some varieties contain high hydrogen cyanide (HCN) content in the roots and leaves of the local cultivars.⁷⁶

Enabling Environment

Recently, the Malawian Government and NGOs have been pushing the production of cassava as a food security measure in times of drought. For example, SARRNET has implemented various initiatives aimed at promoting seed multiplication and distribution of new cassava varieties to address the issue of scarcity of planting materials. Since 1994, cassava production has increased by more than 500 percent as a result of efforts by the Government and SAARNET to replace low-yielding local cultivars.⁷⁷

Profitability

Production of cassava requires minimum capital investment and low direct costs. The gross margins are much more attractive for the farmers compared to other products. According to the 2006/2007 Annual Agricultural Statistical Bulletin, Malawi's current yield is 12-30 tons per hectare and is sold at MK27.44/kg,⁷⁸ while maize yields 400-1,500 kg per hectare and is sold at MK27.65/kg.^{79 80}

Impact

There are many benefits to cassava production. Most directly, increased cassava production will result in improved food security and higher farmer incomes.

Income

In central and southern Malawi, where a majority of farmers' share of crop is sold, cash returns have grown considerably, making cassava one of the most profitable cash crops in the country. A recent study suggests that cassava returns are three times that of maize, groundnuts and tobacco.⁸¹

Spill-over Effects

We can anticipate a marginal impact on the freight and packaging industries as a result of investment in cassava production.

⁷⁵ FAO and IFAD (2004). "Global cassava market study: Business opportunities for the use of cassava," *Proceedings of the Validation Forum on the Global Cassava Development Strategy* 6.

⁷⁶ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

⁷⁷ Ibid.

⁷⁸ US\$0.20/Kg i.e. US\$2,350 - US\$5,880/ ha.

⁷⁹ US\$0.20/Kg i.e. US\$78-294 / ha.

⁸⁰ Ministry of Agriculture and Food Security (2007). *2006/07 Annual Agricultural Statistical Bulletin* (Lilongwe: Government of Malawi). Also see IDEAA/MACE website: <http://www.ideaamis.com/>.

⁸¹ Haggblade, Steven and Ballard Zulu (December 1-3). "The Recent Cassava Surge in Zambia and Malawi," *InWEnt, IFPRI, NEPAD, CTA Successes in African Agriculture Conference*.

Sustainability

Given that cassava production does not heavily depend on purchased farming inputs as compared to other crops, farmers can continue growing cassava with minimum need for extensive seed suppliers, fertilizer distributors or rural credit programs to sustain high yields. Moreover, the environmental effects of cassava production are minimal as the process does not generate the acidification or pesticide residue that may result from the production of other crops.⁸²

3. Pigeon Pea Industry Analysis

Industry Overview

Pigeon pea is the most versatile grain legume used by farmers in Malawi and has been grown in Africa for about 4,000 years.⁸³ In Malawi, the crop is grown mainly by smallholder farmers. It is grown for both local consumption and export, and is generally intercropped with Malawi's staple food crop, maize. Pigeon pea has multiple usages, as grain, firewood and livestock feed, field boundary markings, and soil fertilizer. Pigeon pea is drought-tolerant and provides multiple benefits, as it can produce good yields with limited inputs while also being a potential cash crop. According to the India-based International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), pigeon pea is an agriculture product that benefits the resource-poor smallholder farmer who "operates in a variable, semi-arid environment and generally lacks access to technology, cash, and other resources."⁸⁴

Global Market Landscape

According to the FAO, pigeon pea's world production was approximately 3.5 million tons in 2005. India is both the major global producer and consumer of pigeon pea, accounting for 2.4 million tons, which represents 68.5 percent of world production. Malawi is the fifth largest producer in the world with an estimated 79,000 tons annually as shown in Figure 10. Eastern and Southern African countries are among the largest exporters trying to meet India's growing demand for pigeon pea. Exports are in the form of green and split pea. The split form is called *daal* in India and is a local staple food.

Figure 10: Pigeon Pea World Production (in tons)

Country	2001	2002	2003	2004	2005
India	2,250,000	2,260,000	2,210,000	2,430,000	2,400,000
Myanmar	325,000	466,000	4,85,000	500,000	500,000
Kenya	73,463	93,203	98,280	105,571	105,000
Uganda	80,000	82,000	84,000	84,000	84,000
Malawi	79,000	79,000	79,000	79,000	79,000

Source: Food and Agriculture Organization, FAOSTAT database.

Production in Malawi and Blantyre

Since pigeon pea is a viable crop in dry, wet and subtropical regions, it is well adapted for Malawi. In the southern region, where the city of Blantyre is situated, pigeon pea can be found in Mount Mulanje (40 miles Blantyre), the Zomba Plateau (40 miles from Blantyre) and the Mangochi area (120 miles from Blantyre). According to the official statistics from the Ministry of Agriculture and Food Security of Malawi, both the hectareage and production volume of pigeon pea have grown in the last ten years. However, the trends have not been steady, reflecting one of the major constraints for any agricultural investment in Malawi: the unreliability of the commodity supply (See Figure 11).

⁸² Ibid.

⁸³ Silim, S.N., Mergeai, G., and Kimani, P.M. (eds) 2001. (September 12-15, 2000). *Status and potential of pigeon pea in Eastern and Southern Africa: proceedings of a regional workshop*, (Nairobi: International Crops Research Institute for the Semi-Arid Tropics & Gembloux Agricultural University).

⁸⁴ Ibid.

Figure 11: Production Supply of Pigeon Peas in Malawi

	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Ha	126,494	137,332	136,019	139,899	147,760	138,680	155,990	150,173
Tons	91,569	99,261	105,849	105,315	116,895	93,157	63,883	130,987

Source: Ministry of Agriculture and Food Security, Government of Malawi.

Value Chain Analysis

The size of the domestic pigeon pea market in Malawi is negligible. Almost the entire local production is devoted to exports.

Production

Malawian pigeon peas are grown by smallholder farmers as an intercrop with other products such as maize and cotton. These farmers own small plots of land with an average size ranging from one to two ha.⁸⁵ The quality of the product is irregular and mostly poor, and needs standardization. There are no large-scale commercial estates growing pigeon peas. The farmers sell their yields (between 0.1 to 0.5 tons per hectare) to local traders, who then sell the product to regional middlemen and to the processing companies.

Processing

The processing companies can export the pigeon pea in two forms: raw seed and split as *daal*. The value added to the pigeon pea in this processing activity is not significant: the pigeon pea is split after being dried and cleaned.

Sub-Sector Analysis: Pigeon Pea Processing

The growing demand from India has created a market for processing this commodity. There are four major pigeon pea processing companies in the Blantyre area: Export Trading Company, Transglobe Produce Exports, Rab Processors, and Commodity Processors Limited. Export Trading is the leading processor, with production levels of between 30 to 40 thousand tons per year. Its headquarters are based in Dar-es-Salaam, Tanzania. Transglobe, Commodity Processors, and Rab Processors are locally-owned companies. In addition to pigeon pea processing, Rab Processors also owns several branded pre-packaged products such as roasted peanuts, tea, *daal* and peanut butter.

Even though India is the major buyer, Malawi also exports pigeon peas and *daal* to countries such as United Arab Emirates, Mauritius, Malaysia, South Africa and Indian communities in United Kingdom.⁸⁶ The world *daal* market is closely linked to the Indian diaspora.⁸⁷

Opportunities

Both the establishment of a *daal* processing factory and the extension of existing facilities are recommended investments in Blantyre. *Daal* is an established export product in the city and the business linkages between local producers and Indian and Southeastern Asian buyers are very strong. The City of Blantyre is also located in the center of the southern region with easy access to the growing areas.

Several factors enable the consideration of pigeon pea and *daal* processing as a viable investment opportunity for FDI in Blantyre. The technology requirement for this investment is not high. Since most production is export-oriented, the processing companies enjoy some benefits from the Government of

⁸⁵ Mahmood Dalvy, Commodity Processor Limited (March 26, 2008). Personal interview.

⁸⁶ Ibid.

⁸⁷ Snapp, S.S., Jones R.B., Minja E.M., Rusike J. and S.N. Silim (October 2003). "Pigeon Pea for Africa: a versatile vegetable and more," *Hortscience* vol. 38/6.

Malawi, namely the EPZ designation. This Government initiative promotes export activities through the duty refunds on imported machinery.

Constraints

Supply

The production is solely concentrated on smallholder farmers who are very sensitive to the market behavior of other commodities. This translates into an erratic supply of pigeon peas and an output of variable quality. The availability, quantities and volumes required for an increase in the export capacity of the pigeon pea sector are not guaranteed for the current model of production.

Transportation

Transportation costs account for 30–35 percent of the final costs, especially freight from the processing company to the ports.⁸⁸ Malawian companies need up to 12 days to fill a container for export to India while a South African exporter can fill a similar order in just 48 hours.⁸⁹

Variety

In order to take more advantage of the timing of the Indian harvest, the development of early maturing varieties is recommended. Malawi should export pigeon peas in April and May when the market prices in India are at their peak. The lack of standards and grades also makes it difficult to secure a reliable flow of supply for any *daal* processing factory.

Export Promotion

The Government of Malawi does not have any export promotion program oriented to the pigeon pea industry. Aside from the EPZ incentive, available to any company that exports 100 percent of their products, there is no specific incentive to export pigeon pea or *daal*, in spite of the growth in recent years.⁹⁰

Impact and Feasibility Assessment

Impact

Employment

A stronger pigeon pea export sector would not only create new factory jobs in Blantyre, but also create jobs for farmers, with the increase in demand.

Incomes

The characteristics of pigeon pea—drought-tolerant, no fertilizer required, intercropping capabilities—make this crop very attractive for farmers in comparison to other more expensive crops.

Skill Set

Daal processing does not require a new set of skills for workers or heavy infrastructure and machinery investments. Furthermore, Malawians of Indian origin who own and manage these factories are often well connected with buyers on the sub-continent. Knowledge of the business and ethnic bonds are two major assets of Malawian enterprises competing in the pigeon pea industry.

Feasibility

Demand Factors

Growing demand in India has been steady and, according to the ICRISAT 2007 annual report, this emerging economy imports 254 tons of pigeon pea per year and Africa supplies less than 50 percent of

⁸⁸ Rawindra A. Kamal, Export Trading Company (March 17, 2008). Personal interview.

⁸⁹ Ibid.

⁹⁰ Ibid.

the world demand.⁹¹ In other words, African exports of pigeon pea to India (including Malawi's) have considerable room for growth. Whatever demand for *daal* that Malawi does not fill can be provided by its neighbors (Tanzania, Kenya and Uganda).

Supply Factors

According to interviews with some of the major processing companies in Blantyre, Malawi's pigeon peas are favored for their flavor, taste and size by the Indian and United Kingdom markets.⁹² The other advantage is related to the season. Malawi can produce pigeon peas when India is in off-season. This late harvest allows Malawian exports to compete with the massive Indian local production and commands a 20–40 percent price premium during September–November.⁹³ This advantage is also valid for the United Kingdom's market. A survey of three of the four major pigeon pea processors in the city of Blantyre shows that they are running at full capacity.

4. Chili Industry Analysis

Industry Overview

Malawi produces some of the hottest chilies in the world, known as Bird's Eye chilies or African Bird's Eye (ABE). Malawian Birds Eye chilies are internationally renowned and highly sought after.⁹⁴ In Malawi, chili has recently emerged as a strong export crop with high expected growth. Although the volume of chili production has significantly increased over the last few years, volumes have not been consistent.⁹⁵

Global Market Landscape

As chili is a relatively simple crop to cultivate, it is produced all over the world. The world production level has seen an increasing trend and there has been a significant rise in the production level since the late 1990s. The world production of chili crop totals around 7 million tons, cultivated on approximately 1.5 million ha. The large demand for chili is made by several main countries, as it is an important part of various cuisines and cultures and is also used as a coloring agent. Most of its demand is generated in the food processing industry. India followed by China, Mexico, Thailand, the US, and the UK⁹⁶ are among the major global consumers of chili, whereas the major producers are comprised of countries such as India, China, Spain, Mexico, Pakistan and Morocco.⁹⁷

⁹¹ ICRISAT (2007). *New horizons for scientific excellence for semi-arid tropics, Annual report 2007*.

⁹² Mahmood Dalvy, Commodity Processor Limited (March 26, 2008). Personal interview.

⁹³ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

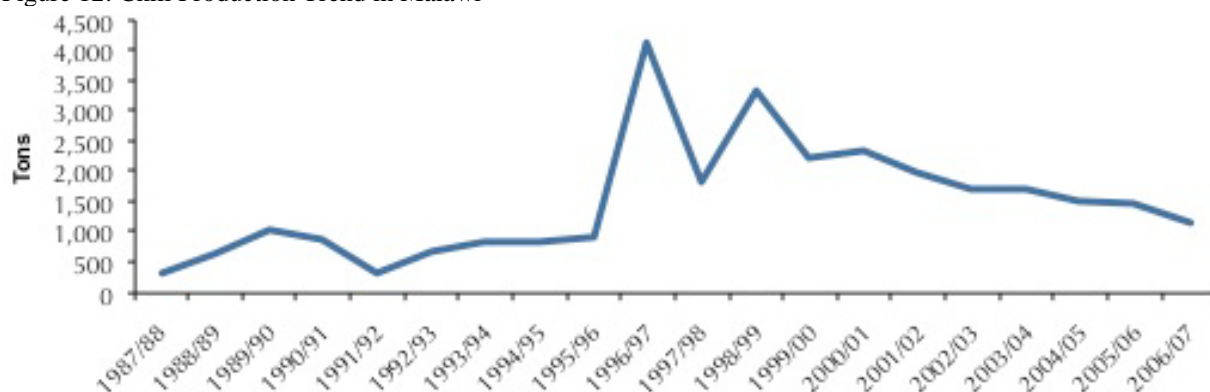
⁹⁴ National Smallholder Farmers Association of Malawi (NASFAM). www.nasfam.org.

⁹⁵ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

⁹⁶ CRN India. *Commodity - Chili*. <http://www.crnindia.com/commodity/chilli.html>.

⁹⁷ Ibid.

Figure 12: Chili Production Trend in Malawi



Source: Malawi Ministry of Agriculture and Food Security.

Production in Malawi and Blantyre

The production volume of chili has been erratic, as shown in Figure 12. In 2006 – 2007, Malawi produced 1,109 tons of chilies.⁹⁸ According to the FAO, the producer price in 2005 was US\$1,291 per ton—eight times greater than that of maize (see Figure 13). In 2006, Malawian farmers exported 77 tons of chilies to Europe.⁹⁹

Figure 13: 2005 Malawian Commodity Price Comparison (US\$/ton)

Commodity	Price (US\$)	Commodity	Price (US\$)
Coffee	1,597	Potatoes	418
Chilies and Peppers (dry)	1,291	Pigeon peas	213
Tea	1,065	Maize	153
Cotton lint	1,022	Cassava	70
Tobacco, unmanufactured	952	Sugar cane	54
Groundnuts, with shell	532		

Source: FAOSTAT.

In southern Malawi, chili has been produced by individual smallholder farmers near Mount Mulanje (40 miles from Blantyre), in Liwonde (100 miles from Blantyre), and in Balaka (55 miles from Blantyre). Based on the 2005 – 2006 data, about 72 percent of Malawi's chilies were produced in the Blantyre region.¹⁰⁰

Currently, Zikometso Smallholder Farmers Association, the largest smallholder chili farmer association in southern Malawi, is capable of producing 200 tons per year. Their products include raw dry chili crop/fruit, chili powder, and chili seed. The proceeds and profits are directly transferred to member farmers.¹⁰¹

⁹⁸ Ministry of Agriculture and Food Security (2007). *2006/07 Annual Agricultural Statistical Bulletin*, (Lilongwe: Government of Malawi).

⁹⁹ FAO Statistics. <http://faostat.fao.org>.

¹⁰⁰ Ministry of Agriculture and Food Security (2008). *Crop estimates data*, (Lilongwe: Government of Malawi).

¹⁰¹ ACDI/VOCA (2003). *Malawi Farmers Find 'Future Belongs to the Organized' Agriculture in the Global Economy*, (Washington, D.C.: Bread for the World & Bread for the World Institute).

Figure 14: Blantyre Chili Production Estimates

Year	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Ton	1,831	1,218	1,258	1,212	1,373	1,192	924	1,045
Hectare	4,088	3,083	2,875	2,706	2,361	3,083	2,102	2,097
Ton/Ha	0.45	0.4	0.44	0.45	0.58	0.39	0.44	0.5

Source: Malawi Ministry of Agriculture and Food Security, *Crop Estimates*.

Value Chain Analysis

Production

Chilies are mainly produced by smallholder farmers with very few commercial inputs. The production of chili is a labor-intensive process, as it requires hand-picking and grading.¹⁰²

Processing

To process as chili sauce, chilies are soaked in hot water, then pounded and ground. Next, spices are added per the sauce recipe and the mixture is steamed in wood-fired boilers. Finally, the cooled product is bottled and packed.

Sub-sector Analysis: Chili Processing

Processing

Chili season lasts from March through August. The initial step of processing chilies consists of drying and grading the fruit on the farm. Washing, drying, and grading are the crucial steps in post-harvest handling, where quality can be most affected.¹⁰³

The harvested fruit is washed in lightly chlorinated water to remove dirt and chemical residues. At the same time, a proper drying is necessary to maintain the quality of the crop.¹⁰⁴ Grading is also a key element in the on-farm processing of chilies. It is based on specified standards for size, color, rotten stock, and foreign matter. There are two basic grades for birds eye chilies—A and B—with a price premium of about MK10¹⁰⁵ between grades.¹⁰⁶

Major Player: Nali Ltd.

Nali is the dominant company in chili sauce production in Malawi and is located in Limbe, a few miles south of Blantyre. Nali produces bottled chili products that are sold to local and regional markets,¹⁰⁷ and is in the process of exporting to international markets such as the US, Canada, and Europe.¹⁰⁸ The company foresees growth in export demand and is optimistic about expanding revenues.¹⁰⁹

Nali currently has 150 employees. Facilities include the headquarters in Blantyre and a factory in Thyolo (about 30 miles from Blantyre). The company's annual revenue is about MK51 million.¹¹⁰ About 65-70 percent of total revenues are from the chili sauce business with a production capacity of 75 percent, which

¹⁰² National Smallholder Farmers Association of Malawi (NASFAM). www.nasfam.org.

¹⁰³ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

¹⁰⁴ Ibid.

¹⁰⁵ US\$ 0.07.

¹⁰⁶ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

¹⁰⁷ 70 percent and 30 percent, respectively.

¹⁰⁸ Monica Khoromana-Unyolo, Nali Ltd (March 17, 2008). Personal interview.

¹⁰⁹ Ibid.

¹¹⁰ US\$372,000.

implies there is room for increasing output.¹¹¹ On the other hand, the company maintains a good relationship with farmers through a network of 5,000 members, supporting them with seeds and technical assistance.¹¹²

Opportunities

Growing local and international demand provides the opportunity for investment in the chili-processing sector. Investment opportunities lie in building export-oriented chili processing facilities to create value-added products such as chili sauce. It is estimated that a chili sauce production facility requires an investment of US\$1 million,¹¹³ most of which is capital cost of equipment purchases.¹¹⁴

There are various factors that justify investment in the chili sub-sector in Blantyre:

1. Given that storage and transport are critical stages in which quality can potentially be eroded, Blantyre is strategically situated for chili processing, as 72 percent of chili is grown in the region.¹¹⁵
2. There is room for growth in the market as there are very few players. Nali is the dominant company with a very large share of the chili sauce market in Malawi. Moreover, there are few foreign brands; hence there is room for competition in the industry.
3. Chili processing is a high-margin business that can enable the firm to absorb some of the costs imposed by poor infrastructure and Malawi's lack of port access.

Constraints

Meeting International Export Standards

Exporting to the US requires compliance with Food and Drug Administration (FDA) standards. Because Malawi's Bureau of Standards (MBS) is not internationally recognized, and does not have adequate capacity for conducting rigorous food tests, individual companies must incur costs to get their products tested in foreign labs. For instance, some of the challenges Nali faced in entering the US market were related to product testing, labeling (for nutritional information), adulteration (occurring on small-scale farms with crude drying and storage procedures or during transport), and quality-assurance auditing (maintaining documentation to confirm the time and temperature of processing at various production stages).¹¹⁶ Another risk associated with export is contamination by aflatoxin, which can build up during transport.¹¹⁷

Increasing Competition in the World Market

South Africa is the dominant regional exporter of chili sauce. Therefore, Malawi will need to compete with South Africa for a share of the export market. Bandito's Chile Co., based in Johannesburg, already exports high quality 100 percent natural chili sauces to Australia, Europe, UK, New Zealand, Canada, Japan, and the US under the "Mama Africa" brand.¹¹⁸ Further, Nando's, a South African restaurant chain with its own brand of chili sauce, operates globally.

¹¹¹ Monica Khoromana-Unyolo, Nali Ltd (March 17, 2008). Personal interview.

¹¹² Edward Labuwana Kholomana, Nali Ltd. (January 17, 2008). Personal interview.

¹¹³ US\$ 14,000 per machine.

¹¹⁴ Edward Labuwana Kholomana, Nali Ltd. (January 17, 2008). Personal interview.

¹¹⁵ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

¹¹⁶ Ibid.

¹¹⁷ Ibid.

¹¹⁸ The Bandito's Chile Co. <http://www.banditos.co.za>.

Lack of Adequate Supply and Quality

Given that many farmers are still not organized, ensuring adequate supply of chilies is a major challenge. Moreover, quality seeds are the most important input for good quality chili sauces. To secure a supply of high-quality chilies required for value-added exports, processors will need to provide seeds to farmers as Nali does, which will increase operating costs.

Impact and Feasibility Assessment

Impact

Employment Generation

The processing of chili is a labor-intensive process. Therefore, investing in chili processing facilities to increase exports of value-added chili products will also generate new opportunities for employment.

Income

High profitability will allow more people to earn greater income and will bring economic security to their communities. If farmers are organized, they can further increase their incomes. For example, farmers who are members of the Zikomestso Association received 35 percent more for their chili peppers compared to nonmembers.¹¹⁹

Local Competitive Environment

A viable business environment will encourage more farmers to produce chilies and operate more chili-processing companies. A competitive environment will increase chili production to meet the increasing international demand and will help guarantee stability in supply and price.

Linkages

The use of local agricultural raw materials creates markets for non-traditional agricultural products. New partnerships will be created with more farmer associations and donors.

Feasibility

Demand Factors

The global exports of chili sauce in 2006 were US\$4.2 billion and global imports were US\$3.9 billion.¹²⁰ Between 2004 and 2006, the volume of sauce imported globally grew at 8 percent per annum, while the global export market grew at 11 percent.¹²¹

Supply Factors

The volume of chili production has significantly increased over the past 20 years. However, the volume has not been consistent, as it has ranged from 1,824 to 3,307 tons per year over the last decade. Additionally, chili yields in Malawi are lower compared to the world's average yield of about 1.8 tons per hectare. For chili sauce production, daily production capacity is 787.5 liters.¹²² Malawian chili production needs to be larger and more stable compared to current levels to meet increasing global demand. To address the supply problem, there have been initiatives from ACDI/VOCA and NASFAM to organize and train farmers, and improve the quality of chili through the provision of seeds and technical supports.

Profitability

Chili is profitable compared to other agricultural products. According to a leading manufacturer of chili sauces, the profit margin of chili sauce is about 40 percent.¹²³

¹¹⁹ ACDI/VOCA (2003). *Malawi Farmers Find 'Future Belongs to the Organized' Agriculture in the Global Economy*, (Washington, D.C.: Bread for the World & Bread for the World Institute).

¹²⁰ United Nations Commodity Trade Statistics Database (UNComtrade). <http://comtrade.un.org>.

¹²¹ Ibid.

¹²² Edward Labuwana Kholomana, Nali Ltd. (January 17, 2008). Personal interview.

¹²³ Ibid.

5. Groundnuts Industry Analysis

Industry Overview

Groundnuts (also known as peanuts) have long been an important part of smallholder production in Malawi. With annual exports of about 50,000 tons, groundnuts were a major export crop for Malawi until the late 1980s.¹²⁴ Until that time, the Agricultural Development and Marketing Corporation (ADMARC) of Malawi was the sole trader of groundnuts and was responsible for buying and selling the seed. However, following the liberalization of Malawi's agricultural markets, ADMARC ceased to keep groundnut seed stocks. Consequently, farmers were forced to recycle their seeds for subsequent years resulting in the deterioration of nut quality.¹²⁵ Although international prices remained somewhat attractive, the export market collapsed between 1990 and 1999 due to quality concerns as a result of changes in shape and plant hygiene as well as changes in demand.¹²⁶ Despite this decline in exports, the crop remains popular and enjoys a strong internal market. Most recently, groundnuts have re-emerged as an export crop due to an organized market through farmers associations such as the National Smallholder Farmers' Association of Malawi (NASFAM), which promotes and markets groundnut cultivation.¹²⁷

Global Market Landscape

In 2005, Malawi ranked 20th in world groundnut output, producing 161,162 tons valued at US\$77.9 million.¹²⁸ Regional competitors include Nigeria, Sudan and Senegal. These regional players exceed Malawi's production capacity level. The largest exporters of groundnuts include China, the US and India. In the region, South Africa and Ghana exceed Malawi in groundnut exports.

Production in Malawi

The total area of groundnuts cultivated in Malawi has rapidly expanded over the past decade, from 71,586 ha in 1996 to 200,000 ha in 2006.¹²⁹ The central and southern areas, including Kasungu, Lilongwe, Machinga and Blantyre, account for over 75 percent of the total area planted.¹³⁰ Total groundnut production has significantly increased in recent years.¹³¹ The national groundnut production was estimated to have increased from 71,586 tons during the period of 1996 – 1997 to 263,492 tons in 2006 – 2007.¹³² In 2004, Malawi exported 8,329 tons of shelled groundnuts, valued at US\$4,109,000, making it the 17th largest exporter in the world by value.¹³³

¹²⁴ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

¹²⁵ Ibid.

¹²⁶ USAID (November 28, 2006). *USAID's Activities on Agriculture and Food Security in Malawi (Draft)*.

¹²⁷ Ministry of Agriculture and Food Security (December 20, 2007). *The Agricultural Development Programme - Malawi's prioritised and harmonised Agricultural Development Agenda: 2008-2012 (Final Draft)*, (Lilongwe: Government of Malawi).

¹²⁸ FAO Statistics. *Major Food and Agricultural Commodities and Producers*.

<http://www.fao.org/es/ess/top/country.html;jsessionid=63FA6E23D632AB87AEBE22F5D26A29E5>.

¹²⁹ Development Associates, Inc (January 2003). *USAID/Malawi's SOI: Increased Agricultural Incomes on a Per Capita Basis – 1993 to 2001*.

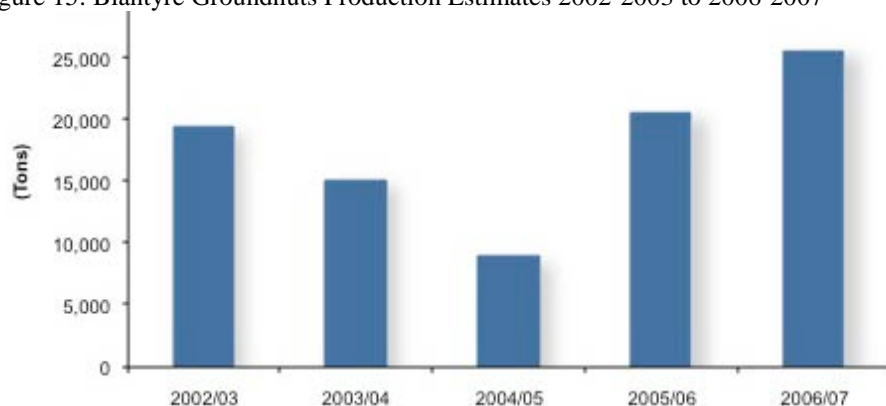
¹³⁰ Malawi Investment Promotion Agency (2007). *Investor's Guide to Malawi 2007*.

¹³¹ Ibid.

¹³² Ministry of Economic Planning and Development (2007). *Annual Economic Report 2007* (Lilongwe: Government of Malawi).

¹³³ FAO Statistics. *Key Statistics of Food and Agriculture External Trade*. <http://www.fao.org/ES/ess/toptrade/trade.asp>.

Figure 15: Blantyre Groundnuts Production Estimates 2002-2003 to 2006-2007



Source: Malawi Annual Economic Report 2007.

In Blantyre alone, 25,179 tons of groundnuts were produced over 26,745 ha in 2007, representing 9 percent of the total production in Malawi (see Figure 15).¹³⁴ The cash value of groundnuts is generally better than most cereal crops. The average retail market price of shelled groundnuts in 2006 in Blantyre was MK 124.54,¹³⁵ which is slightly higher than the national average of MK112.54.^{136 137}

Value Chain Analysis

Production

Groundnuts are almost entirely produced by smallholder farmers. Due to the closure of various ADMARC facilities, there are no adequate marketing vehicles for the groundnut value chain, from small producers to small private traders who then sell to manufacturers that dominate the domestic trade of groundnuts.¹³⁸

Processing

Following harvest, groundnuts are first graded according to size, and then processed into roasted salted nuts, peanut butter, paste, and other products. Furthermore, groundnuts can be used for oil and the cake from oil extraction can be used for animal feed.

Sub-Sector Analysis: Groundnuts Processing

The cultivation of groundnuts offers potential for commercial farming given its value chain. There is no single dominating player in the groundnut-processing sector, with many small and medium size companies competing for market share. Such players include Tambala Food Products Ltd. and Rab Processors, both located in Blantyre.

Tambala is optimistic about growth in sales of groundnut-based value-added products, given high local and international demand. Also, since groundnuts have a high nutritional value—groundnuts provide amino acids, thiamin, riboflavin, protein, and niacin—they are highly sought after by food aid organizations to feed malnourished children, women and HIV-infected patients.¹³⁹ Tambala provides

¹³⁴ Ministry of Agriculture and Food Security (2007). *2006/07 Annual Agricultural Statistical Bulletin*, (Lilongwe: Government of Malawi).

¹³⁵ US\$0.88.

¹³⁶ US\$0.79.

¹³⁷ Ministry of Economic Planning and Development (2007). *Annual Economic Report 2007*, (Lilongwe: Government of Malawi).

¹³⁸ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

¹³⁹ Rex Nyahoda, Tambala Food Products Ltd. (January 15, 2008;). Personal interview.

smallholder farmers with seeds and technical support to ensure product quality. Currently, 100 percent of the company's roasted-nut products are sold entirely in the domestic market. The company provides in-flight packaged peanuts for Malawi's national airline, Air Malawi. Supply shortage presents the biggest challenge to Tambala, as significant funding is required to secure crop supply from farmers. Tambala competes with foreign traders who also buy harvested groundnuts from the same farmers.

Rab Processors, one of the largest and most-diversified food manufacturing companies in Malawi, is also engaged in groundnut processing. According to the company, while some competitors exist for specific products, the agro-processing industry in Malawi has not yet reached a saturation point and there exists room for growth. Rab Processors obtains groundnuts supply mainly from the central region around Lilongwe.¹⁴⁰

The market landscape is also marked by numerous small and medium enterprises that process groundnuts on a smaller scale. For example, Mbado Enterprises in Blantyre is one such small enterprise producing edible oil from groundnuts. Mbado buys groundnuts, extracts and bottles edible oil, and sells cake for stock-feed. It started in 1980 as a two-man outfit, and has now grown to employ over 30 people.¹⁴¹

The use of groundnut processing machineries does not require advanced skills; therefore, a majority of employees in groundnut processing companies are unskilled.

Opportunities

There has been support for international research-extension programs, such as the USAID-funded Groundnut and Pigeon Pea Multiplication (GPM) project conducted from 1999-2002. Significant efforts have been made to enhance high-quality seed multiplication and increase farmers' education regarding quality specifications. Through integrated value chain development enabled by private investment, Malawi can potentially establish itself as a supplier of high-quality groundnuts.

Opportunities for investment exist in:¹⁴²

- Wholesaling, grading, and quality testing for export markets;
- Peanut butter production for local and regional markets;
- Oil extraction for domestic and international markets.

According to NASFAM, Malawian farmers enjoy a competitive advantage in producing groundnuts, given the inexpensive inputs required to produce the crop. For example, groundnut farmers do not need fertilizers, making it cheaper to produce at a low cost, while offering higher yields.¹⁴³

Substantial opportunities exist for export to the Common Market for Eastern and Southern Africa (COMESA) and the EU (particularly the UK). There is also unsatisfied demand for Malawian groundnuts from countries in the region such as South Africa, Zimbabwe and Tanzania. Access to European markets is contingent upon improvement in production, processing and handling to meet EU standards for aflatoxin contamination which must not exceed 20 ppb.¹⁴⁴

¹⁴⁰ Afzel Thassim, Rab Processors Ltd., (January 14, 2008). Personal interview.

¹⁴¹ Stewart Khondowe, Small Enterprise Development Organization of Malawi (March 17, 2007). Personal interview.

¹⁴² Malawi Investment Promotion Agency (2007). *Investor's Guide to Malawi 2007*.

¹⁴³ Gloria Kasongo, NASFAM (March 11, 2008.). Personal interview. .

¹⁴⁴ Mkoka, Charles (November 7, 2007.). *Purging Malawi's Peanuts of Deadly Aflatoxin*, *Sci Dev Net.*, <http://www.scidev.net/en/features/purging-malawis-peanuts-of-deadly-aflatoxin.html>.

Investment recommendation

Given some of the challenges that these corporations face, specifically the lack of financial resources, a recommendation for the groundnut sector is to invest in or partner with already existing companies such as Tambala, Mbado Enterprises and Rab Processors.

Constraints

Supply shortage

Because the supply of groundnuts is largely dependent on smallholder farmers, the lack of consistent supply of raw materials is one of the most challenging issues associated with the groundnut sector. Hence, there is much volatility in output due to fluctuations in smallholder production. Due to market liberalization, the Government stopped guaranteeing prices, which has led to supply scarcity. To address supply constraints, Rab Processors has engaged in contract farming on a small scale. However, due to the lack of legal and contractual enforcement mechanisms, contract farming has not proven to be successful. Despite agreements between local processing companies and farmers to exchange farm inputs for supply guarantees, farmers often sell their products to other buyers that offer a better price during the harvest season.

Quality Control

Management of aflatoxin—a naturally occurring toxin—is a crucial factor for exporting groundnuts. Due to the toxicity of aflatoxin levels exceeding 20 ppb found in groundnuts, the EU ceased importing from Malawi during the 1990's. High Performance Liquid Chromatography (HPLC), which is considered to be the only internationally accepted method of aflatoxin inspection, costs around US\$230 per sample that needs to be assessed. Malawi is currently testing its crops through other forms, including enzyme-linked immunosorbent assay (ELISA) kits, which can be purchased by individual farmers at about US\$1.¹⁴⁵

Impact and Feasibility Assessment

Impact

Employment

Groundnut processing factories will generate employment opportunities. For example, Tambala employs nearly seventy personnel and Rab Processors employs an additional 1,500 workers. Groundnut processing can create employment opportunities for unskilled workers, since the use of processing does not require advanced skills.

Feasibility

Demand Factors

Given high demand in regional and European markets, there is potential for significant price premiums for improved grades and standards of groundnuts. Demand is highly sustainable given unsatisfied demand factors within regional and European markets.

Supply Factors

NASFAM has encouraged production practices that increased traditional variety yields to 700 kg.¹⁴⁶ High quality and stable supply will depend on inputs provided by processors.

Figure 16: Linkages with the Millennium Village Project

The Millennium Villages Project (MVP) in Malawi is approximately 70 km from Blantyre and is located in the Zomba region. The MVP has embarked on the production of groundnuts as a cash crop for the purposes of selling to local companies. Commercial groundnut transactions in this region enjoy the advantages stemming from well-maintained roads. The groundnuts produced in the Millennium Village can be transported to Blantyre at low cost. Investment in groundnuts processing in Blantyre provides unique opportunities to effectively link the MVP with the Millennium Cities Initiative. With strengthened financial capacity enabled by external private investment, groundnut-processing companies can buy larger volumes from MVP farmers. Definitively linking farmers to processors will provide farmers with the incentive to consistently increase production yields, which in turn can mitigate groundnut processing companies' supply shortage issues.

6. Macadamia Nuts Industry Analysis

Industry Overview

The macadamia nut is among the most important expanding cash crops in Malawi. It is often cited as a good alternative export crop. Due to the high initial investments and imported inputs necessary for production as well as a competitive world market, macadamia nuts are only a suitable export crop for estates. Grades and standards are critical in the production and processing of macadamia nuts, particularly concerning food safety and hygiene standards in processing.¹⁴⁷

Global Market Landscape

International competition is intense among major macadamia nut producers such as Australia, Hawaii, Brazil, South Africa and Kenya.¹⁴⁸ Malawi is the third largest producer in Africa, after South Africa and Kenya. The world market price for macadamia nuts has sharply fallen since the late 1990s due to excess supply.¹⁴⁹ Demand for macadamia nut comes especially from the UK, the US, and Japan.

Figure 17: World Macadamia Nut Production and Exports

Country/Region	Area (ha)	Trees ('000)	2003 Production (t)		Kernel recovery (%)	Kernel exports (t)
			Nut-in-shell	Kernel		
Australia	15,000	5,000	30,000	9,100	32	7,460
Central America	8,700	-	17,000	3,100	18	3,100
USA (Hawaii)	7,284	1,350	27,240	4,500	25	200
South Africa	7,000	3,073	12,500	3,400	28	2,975
Kenya	6,500	1,000	8,800	1,000	16	1,000
Brazil	6,000	-	3,000	600	17	540
Malawi	5,112	1,022	4,000	1,000	25	1,000
Zimbabwe	-	-	900	120	-	120

Source: ISHS, *Chronica horticulture*, vol.45, November 2, 2005.

Production in Malawi

The nuts are produced mainly in the Rumphi and Ntchisi regions, in the central and northern parts of Malawi. Macadamia nuts are produced mainly by large estates that are owned by international investment companies.¹⁵⁰ Since production of macadamia nuts requires high initial capital investments and imported inputs, only estates with large acreage have the potential to make a profit in a highly competitive world market.¹⁵¹

¹⁴⁷ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

¹⁴⁸ International Society for Horticulture Science (June 2005). *Macadamia: Domestication and Commercialisation*, *Chronica Horticulture*. <http://www.actahort.org/chronica/pdf/ch4502.pdf>.

¹⁴⁹ FAO Online (May 8, 2001). *Macadamia Situation and Outlook*. <http://www.fas.usda.gov/http2/circular/1999/99-03/macadamia.htm>.

¹⁵⁰ U.S. International Trade Commission (September 1998). *Macadamia Nuts: Economic and Competitive Conditions Affecting the U.S. Industry*.

¹⁵¹ International Society for Horticulture Science (June 2005). *Macadamia: Domestication and Commercialisation*, *Chronica Horticulture*. <http://www.actahort.org/chronica/pdf/ch4502.pdf>.

Under AGOA, Malawi is one of the most notable suppliers of macadamia nuts to the United States; Malawi supplied US\$2.7 million out of a total of US\$54 million of macadamia imports into the US in 2003, representing 5 percent of all macadamia imports.¹⁵²

The low cost of production and high quality of the product makes Malawi an attractive supplier of this crop.

Value Chain Analysis

Production

After harvest, macadamia nuts are stripped of their husks by a dehusker, and the kernels are separated from the shells by steel rollers that exert a pressure to crack the shells without damaging the inside kernels. Then the kernels are sorted out and graded by color while quality control inspectors observe their flow by hand. Raw kernels are packed directly in cans or boxes, while kernels to be roasted are separated and coated in coconut oil.¹⁵³

There are five companies engaged in the production of macadamia nuts in Malawi, including Sable Farming, which is located in Limbe, near Blantyre, and Namingomba Tea Estates Ltd., in the south near Blantyre. Sable Farming owns 883 hectares of land for macadamia nut cultivation. Combining its two factories in Limbe and Mzuzu, the company produces about 400 tons of macadamia nuts per annum.¹⁵⁴

Processing

The nuts can be used for a multitude of purposes: they can be eaten raw, roasted as snacks, and used as ingredients for confectionery products.¹⁵⁵ In addition, oil extracted from macadamia nuts as a byproduct can be used as household cooking oil and in cosmetics manufacturing.

Sub-Sector Analysis: Macadamia Nuts Processing

According to MIPA, three world class nut processing factories are currently operating as a result of recent investment.¹⁵⁶ Sable Farming conducts only simple processing including cracking, washing and drying, and exports almost all of its products in a semi-processed form. A kilogram of nuts fetches between US\$3 – US\$8, depending on the quality of the crop on the retail market.¹⁵⁷ Sable farming employs 2,500 mostly unskilled farmers from various villages. A visit to one of Sable's factories revealed that a high standard of quality control is being ensured through manual labor.¹⁵⁸ Low labor costs are keeping production costs low compared to local competitors.

Opportunities

Given the high value of the macadamia nut, more foreign investment is being sought to boost the production and processing of raw materials. Opportunities for investment exist in commercial macadamia estates.¹⁵⁹ Partnership with foreign investors will increase productivity of local estates through transfer of better technology, expansion of acreage and access to capital for machineries and equipment, including

¹⁵² U.S. Department of Agriculture, Foreign Agricultural Service (March 2004). *World Horticultural Trade & U.S. Export Opportunities*. http://www.fas.usda.gov/http/Hort_Circular/2004/04-02-04%20Web%20Art/2004%20Macadamia%20Situation%20and%20Outlook%20in%20Selected%20Countries.pdf.

¹⁵³ Enotes, Macadamia Nut, Available: <http://www.enotes.com/how-products-encyclopedia/macadamia-nut>.

¹⁵⁴ Lalit Khatri, Sable Faming Co. Ltd., Personal interview, January 17, 2008.

¹⁵⁵ Malawi Investment Promotion Agency.

¹⁵⁶ Ibid.

¹⁵⁷ Nyasa Times, Americans scramble for Malawi nuts, April 21, 2007, Available: <http://www.nyasatimes.com/index.php?news=620>.

¹⁵⁸ Lalit Khatri, Sable Faming Co. Ltd., Personal interview, January 17, 2008.

¹⁵⁹ Malawi Investment Promotion Agency.

macadamia-planting machines, which cost approximately US\$1.5 million.¹⁶⁰ Furthermore, development of commercial estates could also generate employment opportunities for small farmers by hiring them on an on-going basis.

Constraints

Supply Shortage

Inadequate supply is the biggest constraint in the macadamia nut industry. While smallholders are incapable of meeting grades and standards that are required for exports, there are few estates that have large enough land to benefit from economies of scale.¹⁶¹ Sable Farming's factories have more production capacity than current levels. However, due to the lack of raw materials, the company is unable to produce more.

Long-term Investment

Since it takes eight years for a macadamia nut tree to grow and high levels of fixed investment and inputs are required, there is a large lag-time between investment and production. Furthermore, young trees are more vulnerable to diseases and pests than older, more established trees.

Costs Associated with Value-addition

The lack of domestically produced packaging materials and high transportation costs make value-addition within Malawi more costly. Since value-addition has high costs associated with transport and handling, it is more profitable to export semi-processed raw nuts and leave further processing for the destination markets.

Impact and Feasibility Assessment

Impact

Employment

There are limited employment opportunities, as there are only five companies engaged in macadamia nut production. While it depends on the size of an expansion, the potential for employment generation is not very large, given the limited land availability.

Skill Set

Most labor does not require a high-level skill set. For example, Sable Farming employs mostly unskilled farmers from villages, some semi-skilled labor and few skilled laborers who are engaged in research and mechanical operations. If the production or processing of macadamia nuts is expanded, it is most likely that companies will increase the number of unskilled workers. Therefore, the impact that an investment can bring to the workers is limited.

Feasibility

Demand Factors

While there was growing demand from the 1980s until the mid-1990s, keeping prices stable, world prices fell in the late 1990s, as supply stocks overtook demand.¹⁶²

Supply Factors

The crop is mainly produced by estate holdings, as production of macadamia nuts is difficult for smallholders in terms of grades and standards. Thus, the supply shortage is a problem.

¹⁶⁰ Lalit Khatri. Sable Farming Co. Ltd., Personal interview, January 17, 2008.

¹⁶¹ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi PFID-F&V Report*, (East Lansing, MI: Michigan State University and United States Agency for International Development).

¹⁶² US International Trade Commission (September 1998). *Macadamia Nuts: Economic and Competitive Conditions Affecting the U.S. Industry*.

Enabling environment

AGOA offers duty and quota-free access to the US macadamia nut market.

Profitability

Initial investment is high and there is a lag-time between investment and production (it takes eight years before payback). Based on the research by Mataya and Tsonga, the return per hectare is said to be MK 10,274¹⁶³ while the farm gate price is MK 270.00¹⁶⁴ per kg, and the margin after labor cost is MK 21,236,¹⁶⁵ which is higher than other major crops such as maize, cassava, groundnuts and cotton.¹⁶⁶

¹⁶³ US\$74.9.

¹⁶⁴ US\$1.97.

¹⁶⁵ US\$155.

¹⁶⁶ Mataya, Charles S. and Ernest W. Tsonga (2001). *Economic Aspects of Development of Agricultural Alternatives to Tobacco Production and Export Marketing in Malawi Analytical Studies on Trade, Environment, and Development No. 7*, (Geneva: United Nations Conference on Trade and Development).

IV. Conclusion and Recommendations

*"Current opportunities exist...however for further development to occur, government incentives and job training are necessary. The labor force is trainable and labor cost is low compared to South Africa and China."*¹⁶⁷

Malawi faces significant challenges to developing a vibrant private sector to sustain its economic growth. However, a stable political environment, recent macroeconomic stability, and improved external trade terms have been positive developments for one of the world's poorest countries. Moreover, Malawi's historic agricultural production record, marked by high yields in the cotton sector, demonstrates that the country has the potential for sustained economic growth, if given the right impetus through sound economic policy.

An infusion of foreign direct investment has the potential to improve the livelihoods of the country's inhabitants by creating employment opportunities, diversifying the economy and developing the private sector. With a view to encouraging FDI in the promising sectors identified and alleviating the constraints that hamper the growth of these sectors, the authors provide the following recommendations:

- **Identify investors for High Feasibility-Impact sector investment opportunities;**
 - Textile manufacturing factories
- **Advocate for the alleviation of supply-side bottlenecks;**
 - Strengthen the capacity of farmer associations, such as NASFAM
 - Establish industry cooperatives to stabilize markets for each sector
 - Strengthen contract enforcement
- **Support institutional capacity building of key agencies, such as MIPA, MBS and MEPC;**
- **Establish stronger linkages between MPV and MCI; and**
- **Encourage partnerships with development agencies and NGOs involved in value-added agricultural processing projects.**

Identify Investors

Based on the **Investment Evaluation Framework**, the authors identified textile manufacturing as a **High Feasibility-Impact** sector investment opportunity. Value added products such as textiles not only command higher prices in the world market, but also generate many other positive spillovers in the country, such as technology and skills transfers. Given the fact that Blantyre is the commercial center of Malawi, the city is well positioned to take advantage of many of the complementary industries located in the city.

Potential foreign investors may include both partnerships as well as financial investors from the region and outside the continent. It is ideal to seek investors with significant experience in the sector to bring expertise to existing operations or new projects. Furthermore, someone with a longer-term investment horizon is ideal, because the payback period is likely to be long. Also, adding a technical assistance component through an NGO or donor should be considered, given the large presence of these organizations in the country and their contribution to date (see "Encourage Partnerships with Development Agencies and NGOs" below).

¹⁶⁷ K.K. Desai, Knitwear Industries (January 14, 2008). Personal interview.

Advocate for the Alleviation of Supply-side Bottlenecks

Among the processing companies interviewed, most agreed that the unreliability and scarcity of commodity inputs adversely affects the way business is conducted, precluding companies from fulfilling larger orders in a timely fashion. The authors propose the following:

Strengthening of the capacity of farmer associations: Farmer associations have the potential to empower farmers and support the growth of agricultural commercialization. MCI should liaise with donors and farmer associations to identify any possible investment opportunities or linkages in Blantyre. Because the recommended sectors are in agricultural value-added products, it is in the Earth Institute's best interest to connect the processing facilities to organized farmers to ensure consistent quality and quantity.

Establishment of industry cooperatives: Given the complexity and fragmentation of various industry value chains, each sector must deal with significant information asymmetry that destabilizes the market. In the case of Malawi's cotton sector, which lacks vertical integration, the establishment of a National Cotton Council would help align incentives among various industry stakeholders. Although there are numerous sub-sector associations like the Garment and Textile Manufacturer's Association (GTMA), and the Cotton Developer's Association (CDA), a sector-wide association is lacking. MCI could potentially serve as a facilitator that brings representatives from these major groups together.

Strengthening of contract enforcement: For the private sector to function effectively, there must be strong contract enforcement. In Malawi, contracts between smallholder farmers and their respective buyers are not honored in many cases, which deter the formation of strong farmer-market linkages. This ultimately increases production costs for the processing companies, and results in reduced profitability. MCI should continue to collaborate with the Government and international organizations to assess how the capacity of judicial institutions and other bodies overseeing contract enforcement can be strengthened.

Support Institutional Capacity Building of the Key FDI Institutions

MIPA, MBS, and MEPC in Blantyre are vital resources for potential investors. However, limited resources affect their ability to market potential investment opportunities and reach out to investors. The World Bank's Business Environment Strengthening Technical Assistance (BESTAP) project is attempting to reduce redundancies, improve information technology infrastructure, and build capacity among staff. MCI can play a vital role in building the capacity of these key institutions.

Establish Stronger Linkages between MVP and MCI

There should be a conscious effort to establish economic synergies between MCI and MVP which, at the moment, seem relatively limited. This synergy can be an effective vehicle for promoting farmer-market linkages. MVP's Science Coordinator, Rebbie Harawa, and her team have conducted feasibility studies on the commercial opportunities of the various crops grown in the Millennium Villages. MCI should work closely with the MVP team and use the existing feasibility studies as a guide for identifying potential linkage opportunities.

Encourage Partnerships with Development Agencies and NGOs

Many organizations, including the UK's Department for International Development (DFID), USAID, the Clinton Hunter Development Initiative, and Console International, are actively conducting development projects in Malawi aimed at processing agricultural products. It is also likely that some of the identified investment opportunities may require technical assistance in addition to investment, which can be provided by the various development agencies and NGOs operating in Malawi. MCI should seek collaboration with such agencies that have prior experience in Malawi in order to better understand the market and to identify potential investors.

Appendix I. Sectors with Limited Investment Potential

1. Banking Industry Analysis

Industry Overview

The commercial banking sector in Malawi is comprised of leasing companies, finance companies, development institutions, savings banks and numerous insurance companies.

According to the United Nations Capital Development Fund (UNCDF), the Government of Malawi has taken steps to improve the climate for a viable financial industry. These steps include liberalizing the sector, reducing interest rate controls, lowering bank reserves, and removing exchange regulations on capital flows.¹⁶⁸ The Government has also taken steps to improve the regulatory framework to attract private investors. The Companies Act and the Capital Market Development Act are examples of functioning regulatory structures set in place to promote such investments in Malawi.¹⁶⁹ Financial sector reforms have resulted in the entry of several international financial institutions into the banking sector.¹⁷⁰ Moreover, the Government has shown substantial flexibility in relaxing equity-ownership rules for the banking industry: foreign banks are allowed to own a 100 percent stake in their Malawian counterparts.

Major financial institutions include the National Bank of Malawi, Standard Bank, First Merchant Bank, Opportunity International Bank of Malawi, INDEbank, Ecobank (formerly Loita Investment Bank), Malawi Savings Bank, Nedbank Ltd., NBS Bank (formerly New Building Society) and FDH Bank.¹⁷¹ Standic Bank is 60 percent owned by South Africa's Standard Bank, while other foreign-operated banks own nearly 50 percent of the banks' total assets.¹⁷²

Investments in financial services are also being made by the nonprofit sector. The United Nations Development Program (UNDP), UNCDF, and the Government of Malawi have partnered to increase financing services to Malawians particularly in the area of micro-finance.¹⁷³ In June 2007, the Financial Inclusion in Malawi (FIMA) project—a micro-finance initiative—was implemented in an effort to provide services for poor and low-income communities. This initiative will also develop an overall strategy to strengthen the capacity of the financial services industry.¹⁷⁴ According to the UNDP, only 3 percent of Malawi's population has access to credit. To provide services for the rural population, the Malawi Rural Finance Company Limited (MRFC) was established in 1994. The MRFC is 100 percent owned by the Government of Malawi.

Opportunities

Small and Medium-sized Enterprise (SME) Lending

While the banking services market has reached saturation, the biggest business opportunity in the banking sector lies in Small and Medium-size Enterprise (SME) lending. Although there is a need for rural micro-finance, many banks are hesitant to take risks associated with financing at the micro level. The only bank in Malawi that provides micro-finance is the Opportunity and Investment Bank of Malawi (OIBM).

Constraints

Market Saturation and Increased Competition

There are currently eight commercial banks (with two additional banks expected to enter the market in the near future), two discount houses, one leasing corporation, one investment bank, one savings bank and

¹⁶⁸ UNCDF. <http://www.uncdf.org/english/index.php>.

¹⁶⁹ US Department of State (2007). *2007 Investment Climate Statement - Malawi*. <http://www.state.gov/e/eeb/ifd/2007/80721.htm>

¹⁷⁰ KPMG (2004). *Banking Survey Africa 2004*. <http://www.kpmg.co.za/images/naledi/banking%20africa%202004.pdf>.

¹⁷¹ Ibid.

¹⁷² Ibid.

¹⁷³ UNDP Malawi. *Microfinance: Financial Inclusion in Malawi (FIMA)*. <http://www.undp.org/mw/isc.html>

¹⁷⁴ Ibid.

fourteen microfinance institutions in Malawi.¹⁷⁵ Consolidation of banks has not yet taken place and there are too many banks in Malawi considering the size of the country.

Figure 18: Number of Licensed Institutions in Malawi

Institution Type	No. of Institutions
Commercial Banks	8
Discount Houses	2
Building Societies	1
Leasing Companies	2
Savings Banks	1
Majority State-owned (number)	2
As a Percentage of Total Assets	35
Majority Foreign-Controlled (number)	6
As a Percentage of Total Assets	46
Asset Share of the Two Largest Banks	58
Deposit Share of the Two Largest Banks	59
Net Income of the Two Largest Banks	71

Source: UNCDF.

Macro-economic environment

The overall macro-economic environment has not been favorable for foreign direct investment in the financial services sector. The economy suffers from high interest rates, inflation rates, and macroeconomic instability.¹⁷⁶ Most recently, interest rates have declined but still remain high at 25.5 percent in 2008 (IMF estimate) and 25.0 percent in 2009 (IMF projection) as shown below.¹⁷⁷ Thus, the cost of borrowing for many is cost-prohibitive as compared to neighboring South Africa where the 2009 projected interest rate is 13.5 percent.¹⁷⁸

Figure 19: Interest Rates

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Lending rate (%)	53.6	53.1	56.2	50.5	48.9	36.8	33.1	32.2	27.1	25.5	25.0
Deposit rate (%)	33.2	33.3	35.0	28.1	25.1	13.7	10.9	11.0	5.9	3.5	3.0
91-day T-bill (%)	42.9	39.5	42.4	41.7	39.3	28.6	24.4	19.3	13.9	13.5	13.0

Source: IMF, *International Financial Statistics*.

Notes: 2008 figures are estimates. 2009 figures are forecasts.

2. Coffee Industry Analysis

Industry Overview

Arabica coffee, a premium variety of coffee, is the fourth most important export crop in Malawi. Exports are made to European, Asian and American markets.¹⁷⁹ The country's traditional buyers have been the Netherlands, the UK, Germany and South Africa.¹⁸⁰

¹⁷⁵ US Department of State (2007). *2007 Investment Climate Statement - Malawi*. <http://www.state.gov/e/eeb/ibd/2007/80721.htm>.

¹⁷⁶ Ibid.

¹⁷⁷ Economist Intelligence Unit. *EIU DataServices*. <https://eiu.bvdep.com/frame.html>.

¹⁷⁸ Ibid.

¹⁷⁹ Malawi Confederation of Chamber of Commerce and Industry (2008). *Agricultural Sector Business Opportunities in Malawi*.

¹⁸⁰ Semu-Banda, Pilirani (November 21, 2007). *TRADE-MALAWI: Coffee Industry Gets Brewing Again*, IPS News. <http://www.ipsnews.net/news.asp?idnews=40149>.

Coffee is produced in more than fifty countries in the world. Three countries—Brazil, Colombia, and Vietnam—account for almost 60 percent of world production. Malawi is a minor producer in the world coffee market, producing less than 0.02 percent of total world production. However, coffee is still a significant foreign-exchange earner for the country. Production has been declining for a number of years due to a combination of world and local factors, including unpredictable market prices of coffee, escalating input costs and frequent droughts.¹⁸¹

Production

Malawi coffee is 100 percent Arabica, which usually grows at an elevation above 950 meters. Coffee is grown mainly in the north and in the southeast of the country, with little production in the central region. In the south, coffee is grown only by commercial farms/estates (no smallholder production) and is mainly centered around Thyolo (30 miles from Blantyre) and Zomba (38 miles from Blantyre). In the north, coffee is predominately grown by smallholder farmers in associations affiliated with the Mzuzu Smallholder Coffee Farmers Trust (SCFT) and by two small farms around Mzuzu. The profile of the coffee sector is therefore completely different between the north and south.¹⁸²

Value chain

Farmer Organizations

There are two main categories of coffee growers in Malawi: commercial farms/estates, and smallholder farmers. In Malawi there are currently fifteen active organizations that grow coffee: fourteen commercial farms/estates and the Mzuzu Trust, which is comprised of five associations of smallholders. Three growers/processors—Sable, Makandi, and Mzuzu SCFT—account for more than 75 percent of the estimated production in 2006.¹⁸³

Since 2007, the Coffee Association of Malawi (CAMAL) has managed to attract buyers from Switzerland, the US, Canada, and Japan. To push for increased market awareness of the superior quality of Malawi's coffee, CAMAL has joined forces with MIPA, the United Nations Development Program's Growing Sustainable Business (GSB) program, and the United States Agency for International Development (USAID).¹⁸⁴

Opportunity

To boost production, the Government has privatized the Smallholder Coffee Trust in Mzuzu, which empowers smallholder farmers to control coffee production. Thus, opportunities for investment exist in the form of joint ventures with organizations engaged in the production and processing of coffee.¹⁸⁵

Increasing consumption of higher-priced specialty coffee worldwide provides opportunities to growers willing to invest in their coffee crop. Although Malawi has some very good grades of coffee, not all of them qualify as specialty grade, which relegates the sale of crops to the bulk mainstream market.¹⁸⁶ This strategic choice depends to a considerable extent on each producer and their willingness to seek specialty sale and to make the required investment.

¹⁸¹ USAID (November 2006). *Credit Demand and Supply Study of Malawi's Coffee Sector*.

¹⁸² Ibid.

¹⁸³ Semu-Banda, Pilirani (November 21, 2007). *TRADE-MALAWI: Coffee Industry Gets Brewing Again*, IPS News. <http://www.ipsnews.net/news.asp?idnews=40149>.

¹⁸⁴ Ibid.

¹⁸⁵ Malawi Confederation of Chamber of Commerce and Industry (2008). *Agricultural Sector Business Opportunities in Malawi*.

¹⁸⁶ USAID (November 2006). *Credit Demand and Supply Study of Malawi's Coffee Sector*.

Constraints

Low and Volatile World Market Price

Malawi has predominantly supplied beans into the high-volume market segment and has suffered considerably from low and volatile world-market prices since 1989 (following the collapse of the International Coffee Agreement) and continued world oversupply. The result has been a progressive decline of coffee growing in Malawi with growers leaving the industry or reducing their level of production. Furthermore, the financial sector generally has a negative perception of the opportunities in the coffee industry, which translates into a reluctance to provide credits.¹⁸⁷

Poor Road Infrastructure

The poor state of infrastructure, especially roads and bridges, was listed as a major constraint to the development of the smallholder coffee industry. During the rainy season (up to six months of the year), some coffee growing areas are difficult to reach or even inaccessible by motor vehicle.

The end result is a significantly higher cost of production (higher transport cost, vehicle maintenance, etc.) for coffee. The cost associated with the movement of components of the industry's supply chain is prohibitive.¹⁸⁸

3. Dairy Industry Analysis

Industry Overview

Intensive smallholder dairy production in Malawi commenced in 1969. The Government at the time organized farmers into Milk Bulking Groups (MBGs) and established several milk processing plants through the Malawi Milk Marketing (MMM) project. MBGs would purchase milk from members and sell it to a MMM farm located in Blantyre, Lilongwe, or Mzuzu. In 1985, the MMM project was reorganized and a statutory body—Malawi Dairy Industries (MDI)—took over the three MMM dairy plants and farms and were given the mandate to operate on commercial lines. In 1997, the six MDI factories and farms were privatized. As a result, three private dairy processing companies were established in each region of Malawi: Dairibord in Blantyre, New Capital Dairy in Lilongwe, and Northern Dairy Industries in Mzuzu. Since then, two new private investors – Suncrest Creameries in Blantyre and Lilongwe Dairy in Lilongwe – have started operating in the dairy industry.¹⁸⁹

The Malawi dairy industry represents a very small part of the livestock sub-sector and agricultural sector. Malawi has about 4,000 registered dairy farmers producing approximately 6,500 tons of milk annually.¹⁹⁰ There is also the informal market that sells raw milk directly to consumers for home consumption, which is estimated at 27,000 tons.¹⁹¹

As shown in Figure 20, the local supply of fresh milk from both informal and formal sectors only meets about 60 percent of demand.¹⁹² Therefore, the dairy industry relies on imported milk powder, which covers 90 percent of the unmet demand.¹⁹³ South Africa is the major country of origin for milk powder in addition to Denmark, the Netherlands, Italy, New Zealand, Argentina and Australia.¹⁹⁴

¹⁸⁷ Ibid.

¹⁸⁸ Ibid.

¹⁸⁹ Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi* (Nairobi: RATES Center).

¹⁹⁰ Malawi Investment Promotion Agency (MIPA). *Priority Sector for Investment: Agriculture/Agro-processing*. http://www.malawi-invest.net/inves_opp_agri.html

¹⁹¹ Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi* (Nairobi: RATES Center).

¹⁹² Ibid.

¹⁹³ Edwin Chilundo, Dairibord Malawi (Private) Limited (March 19, 2008). Personal interview.

¹⁹⁴ Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi* (Nairobi: RATES Center).

Figure 20: Milk Production Estimates

Source	Total Quantity	%	Liters/Day equivalent
Formal	6,500	13	17,808
Informal	27,000	50	73,972
Imports	20,000	37	54,794
Total	53,500	100	146,752

Source: Imani Development Consultants.

Malawi's milk consumption in 2002 was 4.7 kg/capita/year as indicated in Figure 21, in comparison to an African average of 15kg/capita/year.¹⁹⁵ This shortfall underlines the opportunity for investment in the industry.

Figure 21: Milk Consumption per Capita in Malawi (kg)

Year	1990	1995	1996	1997	1998	1999	2000	2001	2002
Whole Milk Consumption	5.2	3.7	4.0	4.2	4.0	3.9	3.6	3.6	4.7

Source: FAO Database, 2005.

Value Chain

Generally, farmers that join MBGs (i.e. with a tank and cooling facility) are serviced by processing companies on a daily basis. The processed products are then distributed to the wholesalers and retailers to be sold primarily to urban consumers. Rural consumers purchase raw milk directly from the informal sector. Additionally, imported powdered milk is used by producers to supplement raw milk while imported dairy products such as long-life milk are sold directly to wholesalers and retailers.

Production

The dairy industry is better developed in the south of the country. Of the three Milk Shed Areas (MSAs) in Malawi, around 80 percent of formal milk is produced in the Blantyre milk shed. The Shire Highlands area, a plateau in the south with an area of about 2,800 square miles, is said to be suitable for smallholder dairying with good feed resources, a favorable climate, and a relatively low disease challenge to dairy cattle.¹⁹⁶ The milk collection network is also well developed in this area and it provides farmers with a convenient selling point and thus a valuable asset.¹⁹⁷

Twenty MBGs are registered and all are organized through the Southern Highlands Milk Producers Association (SHMPA). Altogether 2,700 smallholder farmers are registered into twenty-one MBG's. The average MBG delivers around 528 liters of milk per day equal to 12,157 total liters per day. Average total milk collection per day in Blantyre MSA has increased from 9,201 liters per day in 1998 to 12,157 liters per day in 2004.¹⁹⁸ However, individual farmers produce on average about 7 liters per day, while commercial farmers have the potential to produce up to 40 liters per day.¹⁹⁹

Processing

Two of the five major dairy processing companies, Dairibord and Suncrest Creameries, are located in Blantyre. Apart from these five companies, some smaller scale processing units are active around the major cities.

¹⁹⁵ Ibid.

¹⁹⁶ Encyclopædia Britannica Online (2008). "Shire Highlands," (Chicago: Encyclopædia Britannica, Inc.).

¹⁹⁷ Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi*, (Nairobi: RATES Center).

¹⁹⁸ Ibid.

¹⁹⁹ Edwin Chilundo, Dairibord Malawi (Private) Limited (March 19, 2008). Personal interview.

Because local producers are only able to produce 60 percent of the requirement of the processing industry, the processing companies are forced to import milk powder to meet demand, raising the cost for some processors. As a result, the utilization rate of the dairy industry is as low as 26 percent, causing severe financial problems for some companies.²⁰⁰ The retail milk price is about MK115 – 120²⁰¹ per liter, while powdered milk is significantly more expensive at MK 848²⁰² per kg. Raw milk sold directly by farmers is much cheaper.

In addition, due to bilateral free trade agreements, dairy products from Zimbabwe enter Malawi at very competitive prices. This also causes unfair competition against local producers as processors have to pay a surtax on packing materials whereas imports are duty free and exempt from the surtax.²⁰³ In addition, many of the value-added products are imported from South Africa.²⁰⁴

Recently, a Dairy Processing Association has been created to increase collaboration among Malawian dairy processors. This association is currently headed by Dairibord.²⁰⁵

Major Market Player: Dairibord Malawi (Private) Limited

Dairibord, established in 1998, is 60 percent owned by Dairibord Zimbabwe Ltd.; the remaining ownership stake is equally shared between the Malawian Government through the National Investment Fund (20 percent) and by the employees of Dairibord (20 percent). Dairibord manufactures a wide variety of dairy products including short- and long-life liquid milk, fresh cream, powdered milk, cheese, butter, yoghurt, and ice cream. Dairibord has annual revenues of about MK1.2 billion²⁰⁶ and employs around 160 people. It has 60 – 65 percent of the market share in Malawi and 80 percent of the market share in Blantyre.²⁰⁷ Dairibord has the capacity to process 40,000 – 50,000 liters, though only 38 percent of its capacity is currently being used.²⁰⁸

Opportunity

Investment opportunity in the dairy sector is limited. Many of the opportunities suggested included cattle breeding, feed growing and feed production. Technical assistance on artificial insemination may require funding from donors rather than private investors.

Constraints

There was a deficit of approximately 25.6 million liters of milk in 2006. Given the fact that many Malawians cannot afford to buy milk, there is a business opportunity to increase consumer access to high-protein dairy products at a lower price. However, due to many of the constraints mentioned below, most of the investment opportunities are for donors (and not private sector investors) to improve milk production yields through cattle breeding, feed production, technical assistance (artificial insemination), and increasing access to finance.²⁰⁹

For example, USAID is encouraging smallholder farmers to diversify into dairy production, a very lucrative business in Malawi and well-suited to Malawi's limited land area. USAID grantee Land O' Lakes (LOL), partnering with World Wide Sires (WWS), continues to promote the growth of the dairy

²⁰⁰ Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi* (Nairobi: RATES Center).

²⁰¹ US\$0.84 – 0.87.

²⁰² US\$6.19.

²⁰³ Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi* (Nairobi: RATES Center).

²⁰⁴ Ibid.

²⁰⁵ Edwin Chilundo, Dairibord Malawi (Private) Limited (March 19, 2008). Personal interview.

²⁰⁶ US\$8.8 million.

²⁰⁷ Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi* (Nairobi: RATES Center).

²⁰⁸ Edwin Chilundo, Dairibord Malawi (Private) Limited (March 19, 2008). Personal interview.

²⁰⁹ Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi* (Nairobi: RATES Center).

industry in Malawi through 55 dairy associations with over 6,376 members (46 percent of which are women).²¹⁰

Low Productivity and Efficiency

The average milk production per day in Malawi is estimated at 5.7 liters per cow. Smallholder productivity is still very low mainly because of limited knowledge and the lack of critical inputs such as feeds and artificial insemination. Factors that cause low productivity and slow herd growth are: lack of good animal husbandry practices, long calving intervals, lack of good quality feed, and insufficient veterinary, artificial insemination and extension services.²¹¹

Because of the low production level, many of the processing companies are operating at a low-capacity level of about 30 percent.

Lack of Cattle

The dairy sector suffers from a limited number of cows. This is partly caused by farmers' decision to abandon investing in cows due to rampant theft many years ago and the high costs associated with maintenance of cows.²¹² The Government of Malawi is importing about 5,000 cows annually; the Clinton Hunter Development Initiative is launching a new project to address this issue.²¹³

Access to Capital

Smallholder dairy farmers are considered risky borrowers. Increasing access to capital can help farmers access inputs to increase their productivity.

Demand

Despite growing demand, the price of milk continues to be prohibitively expensive for the average Malawian household, making it a luxury consumption item. Moreover, a high percentage of households in Malawi do not have refrigeration facilities to store fresh milk.

4. Tea Industry Analysis

Industry Overview

Malawi was the first country in Africa to grow tea on a commercial scale. Tea production started in the Mulanje region in the 1880s.²¹⁴ Tea is the second most important export crop for Malawi and it represents 7.9 percent of total export earnings. Tea is exported to European, Asian and American markets.²¹⁵ In 2006, Malawi exported 43,990 tons of tea, equivalent to US\$49.5 million, or around 4 percent annual world exports.²¹⁶

In terms of crop size, Malawi is the second largest producer of tea in Africa after Kenya, producing medium grade teas of which specialty buyers have limited interest.

FAO projects world black tea production to grow at 1.9 percent annually over the next 10 years reaching 3.1 million tons; world green tea production is expected to grow at a faster rate of 4.5 percent annually

²¹⁰ US Department of State, Bureau of African Affairs (October 2007). *Background Note: Malawi*. <http://www.state.gov/r/pa/ei/bgn/7231.htm>.

²¹¹ Imani Development Consultants (June 2004). *Review of the Dairy Industry in Malawi* (Nairobi: RATES Center).

²¹² Martin B.W. Banda, USAID (March 11, 2008). Personal interview.

²¹³ Edwin Chilundo, Dairibord Malawi (Private) Limited (March 19, 2008). Personal interview.

²¹⁴ Butler, Reg (March 20, 2005). "Africa tea faces over-production", *Tea & Coffee Trade Journal*.

²¹⁵ Malawi Confederation of Chamber of Commerce and Industry (2008). *Agricultural Sector Business Opportunities in Malawi*.

²¹⁶ United Nations Commodity Trade Statistics Database (UNComtrade). <http://comtrade.un.org>.

reaching 1.57 million tons. In terms of consumption, black tea demand is projected to reach 2.8 million tons, indicating an oversupply of about 300,000 tons as strong consumption growth in producing countries is unlikely to offset declines in traditional net import markets.²¹⁷

Figure 22: World and Malawi Tea Price Trends



Source: FAO.

Since 2006, the oversupply of tea that had persisted for many years started waning. According to an FAO report, world tea prices were expected to maintain their upward trend in 2008 as a result of tight supply on the world market caused by a projected 10 percent decrease in Kenyan production that resulted from the political instability that occurred early in the year.²¹⁸ Tea exports from India, the second largest producer in the world, was reported to have risen about 10 per cent in 2008, due to the lower output from Kenya and higher prices. Output, on the other hand, rose about four per cent.²¹⁹

Production

Today, large commercial estates account for 93 percent of tea production, with the remainder produced by 6,500 smallholder growers. Most of the estates are based in the districts of Mulanje and Thyolo, with ownership concentrated among 11 companies, of which the largest is Eastern Produce Malawi (EPM) which owns and operates twenty-one estates. The major shareholder in EPM is Kenya-based Linton Park Plc. The development bank, Industrial Development Corporation of South Africa, is a minority shareholder.²²⁰

Many of the estates work closely with smallholder tea growers providing them with fertilizers and other inputs. The provision of credit by the estates is critical to ensuring good and consistent quality and quantity from growers.

Roughly one-third of Malawi's crop is sold by means of a local auction—the Limbe Auction—with two-thirds sold directly. A high proportion of the tea is bought by major international companies such as Unilever and Lyons Tetley. The biggest export destinations are the UK and South Africa.

²¹⁷ FAO News (February 14, 2008). *Tea prices to maintain upward trend in 2008*.

<http://www.fao.org/newsroom/en/news/2008/1000784/index.html>.

²¹⁸ FAO. *Championing the cause of cassava* <http://www.fao.org/NEWS/2000/000405-e.htm>.

²¹⁹ The Hindu (February 09, 2009). "Tea exports rise 10 pc in 2008; output up 4 pc", (New Delhi).

²²⁰ Butler, Reg (March 20, 2005). "Africa tea faces over-production", *Tea & Coffee Trade Journal*.

The two major Malawian tea brokers are Tea Brokers Central Africa Ltd. and Tea & Commodity Brokers Ltd. Purchasing tea locally is often difficult given the presence of international companies (e.g. from the UK) that purchase tea in bulk at local auctions. The tea price increased in 2008 due to the reduction in supply caused by the political instability in Kenya.²²¹

Processing

Malawi's major tea processing companies are: the Mulli Brothers-owned Chombe Tea (focused on high quality tea), Rab Processors (which targets rural areas), Mateco, Mygold (a relative newcomer into the market), and Mulli Brothers (a new market entrant). International competition includes South African brands such as Five Roses. Foreign companies often purchase tea from Malawi, export it to South Africa, blend and package it, and then import it into Malawi at a premium price.²²²

The production process flow is as follows: 1. Purchase processed tea in paper sacs from the auction or the tea estates; 2. Blend tea manually; and 3. Package tea using machines.²²³

Company Profile: Chombe Tea

Chombe Tea was established fifty years ago, and is currently entirely owned by Press Corporation, the largest conglomerate in Malawi, with interests in finance and manufacturing, among others. The tea was blended and packed by Tambala Foods, a subsidiary of Press Corporation Limited. In 2004, the latter sold Tambala Foods with all its brands except Chombe Tea. Chombe Tea was maintained as a subsidiary from Press Corporation and currently has 42 employees. In 2007, the company produced about 360 tons of tea and generated about MK150 million²²⁴ in sales.²²⁵

Chombe Tea has three product lines: Export Quality,²²⁶ Economy,²²⁷ and Leopard.²²⁸ It currently has about 65 percent of the total market share in Malawi.²²⁹ The company does not own any tea farms and purchases processed tea through auction (60 – 70 percent) or private sale (30 – 40 percent). Chombe Tea has the capacity to blend 3,000 kilograms daily. The company does not face a capacity constraint even if export quantities substantially increase.²³⁰

Press Corporation had been unsuccessful at attracting a joint venture partner. Consequently, Chombe Tea was recapitalized and Press Corporation injected new funds to enable the purchase of new production machinery and the provision of working capital. The company invested in full automation of all its product lines, new corporate branding, new packaging for all of its product lines, and the introduction of new product-tagged tea bags.²³¹

Currently, Chombe Tea sells its products mainly for local consumption. The company views exports as a major area of growth and plans on increasing its exports to contribute 40 percent of total production

²²¹ FAO News (February 14, 2008). *Tea prices to maintain upward trend in 2008*. <http://www.fao.org/newsroom/en/news/2008/1000784/index.html>.

²²² Yvonne M. Chikwiri, Chombe Tea (March 20, 2008.). Personal interview.

²²³ Ibid.

²²⁴ US\$1.1 million.

²²⁵ Yvonne M. Chikwiri, Chombe Tea (March 20, 2008.). Personal interview.

²²⁶ Constitutes 70 percent of total company revenues.

²²⁷ Constitutes 40 percent of total sales volume.

²²⁸ Targets the low income segment.

²²⁹ Yvonne M. Chikwiri, Chombe Tea (March 20, 2008.). Personal interview.

²³⁰ Ibid.

²³¹ Press Corporation. *Chombe Tea*. <http://www.presscorp.com/index.php?module=htmlpages&func=display&pid=5>.

volume. The new market that the company is contemplating exporting to is Zambia (where currently an established tea brand does not exist), South Africa, Mozambique, and possibly Europe.²³²

Opportunity

Investment opportunity in the tea sector is limited. MIPA recommends investment in 'new' high-yielding clonal varieties to improve quality and productivity as well as in irrigation infrastructure, which can significantly increase yields. However, these investments are more likely to be conducted by donors.

One potential area of investment is refurbishing existing tea processing facilities and the construction of new tea processing facilities for export purposes. Opportunities exist particularly in the production and processing of green tea for East Asian markets and other specialty herbal teas.

Constraints

Lack of Value Addition

Much of the tea produced in Malawi is sold in auctions for export only to be imported back into Malawi in processed form for consumers. Many of the players in the value chain, ranging from smallholder tea growers to estates, are currently not able to take advantage of extensive contribution margins due to the lack of value addition.

Transportation Cost

Transportation costs related to exporting tea are a major issue for processing companies since Malawi is landlocked and infrastructure is limited. Targeting neighboring countries instead of Europe or the US may mitigate this issue.

Export Issues

Neighboring countries such as Zambia require tea to be sold on credit, which can cause cash flow issues for commercial enterprises. This is a major sticking point in negotiations between parties and is the reason why Chombe Tea exports to Zambia are currently on hold.

Access to Finance

Many of the estates that provide credit to smallholder tea growers achieve high repayment rates (greater than 95 percent), since repayment is deducted monthly from green leaf purchases. However, because estates are not financial institutions, there is an unmet credit demand for the majority of existing smallholder tea growers.²³³

5. Telecommunications Industry Analysis

Industry Overview

Since 1996, the telecommunications sector in Malawi has experienced dynamic activity with new major players in the mobile, internet and fixed line markets. The monopoly of the government-owned cellular operator Telecom Networks Malawi (TNM) ended in 2001, when Celtel Malawi entered the market. Celtel Malawi is part of the Celtel Group, a pan-African mobile service provider operating in 15 African countries.²³⁴ Since April 2005, Celtel Group has been a wholly fully owned subsidiary of MTC Group, a Kuwait-based mobile service provider operating in five countries in the Middle East. TNM's market share is said to be approximately 40 percent, while Celtel controls 60 percent.²³⁵ Between these two companies, the number of active connections is less than one million, which is seven percent of the population in

²³² Ibid.

²³³ USAID. (June 2006). *Credit Demand and Supply Study of Malawi's Tea Sector*.

²³⁴ Celtel. www.celtel.com.

²³⁵ Daniel Makata, TNM (March 27, 2008). Personal interview.

Malawi. The mobile sales are heavily concentrated in the “top-up business” (prepaid cards), with a volume of negligible post-paid contracts. The reason for this structure is the consumer’s income level: prepaid cards allow more usage control and post-paid contracts are more expensive. In addition, the Government of Malawi is currently finishing the process of awarding a license to a third mobile operator. In 2007, five companies applied for a license, including the South African-based company Econet Wireless and the US-based company Millennium Global Telecom.²³⁶

Regarding fixed lines, Malawi has one service provider: Malawi Telecommunications Ltd. (MTL). In February 2006, the government-owned MTL was privatized and handed over to THL, a consortium comprised of Press Corporation Limited, NICO Holdings Limited, Old Mutual Society, and Detecon GmbH.²³⁷ In 2007, the Malawi Communications Regulatory Authority (MACRA) awarded the second fixed-line license to Access Communications Limited, a consortium of African investors.²³⁸ In July 2008, Globally Advanced Integrated Networks (GAIN) was awarded the third mobile phone license. The company intends to roll out its network in May 2009.²³⁹ Shortly after that, MACRA opened applications of six bidders for the fourth mobile phone service license.²⁴⁰ In spite of the continuous growth of these two markets, there are growing concerns about their state of maturity.

After ten years of operation, the Internet Service Provider (ISP) sector in Malawi is also already crowded. There are several companies providing web-hosting, web-mail and wireless services such as Malawi Net, Globe Internet, Skyband Corporation and MTL-Liberty. The bulk of the business is concentrated in the more expensive wireless-based corporate services, of which 50-60 percent is in Malawi Net and Skyband. Individual consumers are still mainly using dial-up connections. However, more than 75 percent of the approximate 40,000 internet users, both corporate and individual, are located in the urban areas of Blantyre and Lilongwe.²⁴¹ The ISPs have also begun to offer new types of services such as Wi-Fi hotspots around Blantyre, Lilongwe and other major touristy areas. Due to this growth in corporate wireless and the demand for broadband services, the ISPs have reached a bottleneck due to lack of capital and limited access to bandwidth.

The industry is regulated by MACRA, which was established under the Communications Act of 1998. This legislative and regulatory framework was designed for the liberalization of the telecommunications sector as well as for enhancing the participation of the private sector.

Similar to most African countries, Malawi’s telecommunication indicators regarding access to telephones, internet, mobiles and personal computers have significantly improved in recent years according to the World Bank and the International Telecommunications Union. Between 2000 and 2005, Malawi increased the number of telephone main line access per 1,000 inhabitants from 4 to 8, internet users increased per 1,000 inhabitants from 1 to 4 and personal computer users per 1,000 inhabitants from 1 to 2. The major increase was in the number of mobile subscribers per 1,000 inhabitants, which increased from 4 in 2000 to 33 in 2005, representing a more than 600 percent increase. As a percentage of GDP, the total telecommunications sector revenues climbed from 1.7 percent to 4.5 percent in the same period.²⁴² However, Malawi’s “telecommunication revolution” is limited in comparison to the rest of Sub-Saharan

²³⁶ Chimwala, Marcel (August 15, 2008). "Malawi names preferred bidder for third mobile licence ", *Engineering News Online* (Johannesburg).

²³⁷ The Privatization Commission. <http://www.privatisationmalawi.org/>.

²³⁸ Chimwala, Marcel (June 29, 2007). "Malawi’s second operator moves to expand network", *Engineering News Online* (Johannesburg).

²³⁹ Gondwe, Gregory (July 23, 2008). "Malawi: GAIN awarded mobile cellular operator licence in Malawi", *Bizcommunity.com*.

²⁴⁰ Gondwe, Gregory (July 30, 2008). "Malawi: MACRA unveils bidders for 4th mobile licence", *Bizcommunity.com*.

²⁴¹ Ken Thomas, Skyband Corporation (March 26, 2008.). Personal interview.

²⁴² World Bank (April 2007). *World Development Indicators Database*.
<http://devdata.worldbank.org/external/CPPProfile.asp?CCODE=MWI&PTYPE=CP>.

Africa, where there is an average of 17 subscribers with telephone main line access per 1,000 inhabitants, as well as 125 mobile subscribers and 29 internet subscribers per 1,000 inhabitants.²⁴³

Opportunity

The major opportunity in the telecommunications sector is the overall growth that this sector is experiencing across Africa. Mobile technology allows underserved and rural areas to connect to urban areas with little investment required. The focus of the Government of Malawi on rural infrastructure can provide an opportunity for Blantyre-based companies. The rural plan consists partly of the development of “telecenters” —kiosks with an array of basic telecom services such as phone, mobile and internet— whose operations may be in charge of a public-private partnership.

The private sector has not been a major actor in the development of the telecommunications sector in Malawi. For example, there is a lack of centers to train people in computer and telecommunications skills. In addition, investments in the telecommunications infrastructure and human capital typically associated with this industry (e.g. local technicians, engineers and programmers) are limited. Blantyre’s urban area may constitute a market large enough for a kiosk-related investment with a range of telecommunications services, but the ISPs do not provide incentives for SMEs and the equipment is expensive.

The arrival of a second fixed line operator can provide an opportunity for better dial-up connections. Further, if access to greater bandwidth is obtained, ISPs can expand new wireless-based services. New market strategies for increasing airtime can also extract more profits from an almost-exhausted market.

Mobile companies and ISPs may also lobby for the reduction of duties and import taxes for handsets, routers and other telecom-related machinery.

Constraints

Market Saturation

The major constraint for both the mobile and internet markets is market saturation. The pace of growth is diminishing and the technical bottlenecks and limitations of a poverty-ridden country are dramatically reducing the room for new investments and entrants. The cost of entry to those markets is increasingly high and recently admitted operators are expected to face entrenched and seasoned competitors.

The rural initiative has been designed and promoted by the Government of Malawi as a development project with the help of the World Bank. A for-profit company may find the rural telecenters an unattractive investment. The initial investments in equipment can be high and the unreliability of the demand increases the risk of the business. Furthermore, technological challenges may emerge in the connection of these underserved areas with the main telecom infrastructure of the country.

Difficulty to Increase the Bandwidth

The difficulty of increasing the bandwidth is a major limitation for the scope of services the ISPs can provide to Malawi users. The inadequacy of the power supply and the quality of fixed line connections are also technical constraints affecting the overall sector.

6. Tourism Industry Analysis

Industry Overview

According to the National Strategy for Sustainable Development (NSSD), the tourism industry worldwide is experiencing high growth and is at its peak in Malawi.²⁴⁴ Tourist attraction areas in Malawi are mostly

²⁴³ Ibid.

centered around Lake Malawi which has two resort areas, Mangochi, located on the south side of the lake and the Salima area, on the Western Shore. In the Blantyre area, major attractions include Mount Mulanje, Majete National Park, Zomba Mountain, Liwonde National Park, and tea estates in Thyolo.

The Malawi Government Development Strategy (MGDS) has identified the tourism industry as a priority sector, with potential for growth, and is assisting in the development of this sector. The tourism industry has the potential to be an employment-generating sector, and help generate economic development. The tourism industry accounts for 7 percent of GNP, and 5 percent of employment.²⁴⁵ Malawi is an attractive tourist destination due to its natural landscapes and vibrant culture; however, it lacks the infrastructure and investment necessary to sustain a critical mass of tourists or visitors.

The Government of Malawi is currently strengthening the infrastructure necessary to sustain the viability of this industry.²⁴⁶ Improvements have been seen in road networks, airports, railways, lake transport, and water and energy supply.²⁴⁷ According to the Government's Strategic Tourism Development Plan for 2003 – 2008, efforts are also being made to strengthen the facilities of the Ministry of Tourism Parks and Wildlife, with a view to targeting the ecotourism market.²⁴⁸ Furthermore, the Ministry of Finance, in conjunction with the Malawi Tourism Association, has identified incentives to attract foreign investments in this sector. These incentives include the construction of hotels and other tax-free opportunities such as duty-free imports of vehicles for tourism.²⁴⁹

Another plan aiming to develop tourism in Malawi is the aforementioned NSSD in which tourism is identified as a priority. The objective of the NSSD is to enable Malawi to maximize its potential for tourism development.²⁵⁰ Projects mentioned in the NSSD include Lake Malawi and its islands, national parks and game reserves, mountain plateaus and urban centers.²⁵¹

Additional strategies to strengthen this sector include the Hotel and Tourism Act that aims to establish resort-like attractions such as casinos in Blantyre and Lilongwe.²⁵² Since 50 percent of tourists in the region are on business, hotels that focus on business travelers have proven to be fairly successful in Blantyre.²⁵³ In the city, there are five hotels that can provide services at par with international standards and with a capacity to accommodate about 1,000 guests.²⁵⁴ High-grade hotels such as Malawi Sun Hotel, Protea Hotel and Victoria Hotel, as well as surrounding attractions such as Mulanje Mountains, Shire River, and Zomba villages, among others, have the potential to attract visitors.²⁵⁵ Successful investments within the tourism industry include the South African-owned Protea Hotel, which has generated positive returns; the Victoria Hotel, Malawi Sun Hotel, and the Cresta Hotel in Lilongwe, which is locally owned.

²⁴⁴ Ministry of Mines, Natural Resources and Environment (2004). *The National Strategy for Sustainable Development*. available at: <http://www.sdn.org.mw/enviro/chilwa/ministry/strategicplan/>.

²⁴⁵ Regional Program on Enterprise Development (June 2006). *The Malawi Investment Climate Survey*, (Washington, D.C.: World Bank).

²⁴⁶ Ministry of Mines, Natural Resources and Environment (2004). *The National Strategy for Sustainable Development*. available at: <http://www.sdn.org.mw/enviro/chilwa/ministry/strategicplan/>.

²⁴⁷ Ibid.

²⁴⁸ Ibid.

²⁴⁹ Isaac Katopola, Ministry of Tourism, (January 7, 2008). Personal interview.

²⁵⁰ Ibid.

²⁵¹ Ministry of Mines, Natural Resources and Environment (2004). *The National Strategy for Sustainable Development*. available at: <http://www.sdn.org.mw/enviro/chilwa/ministry/strategicplan/>.

²⁵² Malopa, Bright Marc E (January 4, 2007). *Rich in Resources: Poor Promotional Methods Ampres Tourism Growth*. available at: <http://www.nyasatimes.com/index.php?news=83>.

²⁵³ Salad Nthenda, Malawi Tourism Association (March 18, 2008). Personal interview.

²⁵⁴ Ibid.

²⁵⁵ Isaac Katopola, Ministry of Tourism, (January 7, 2008). Personal interview.

The number of visitors to Malawi has grown significantly over the past decade. In 2006, 683,000 people visited Malawi, compared to only 183,800 in 1996.²⁵⁶ According to the 2006 data for Malawi, 49 percent of visitors were business travelers, 26 percent were tourists, and 25 percent were visiting friends and family members. Of the 683,000 visitors in 2006, 87,000 (or 14 percent) visited Blantyre; about 32 percent of these were business travelers.²⁵⁷ Despite efforts being made to develop this industry, the current occupancy rate for international quality hotels and lodges remains low, at about 46 percent.²⁵⁸

Opportunity

Investment opportunity in the tourism sector in Blantyre is limited. Construction of business hotels and a conference facility have been contemplated, though demand seems to be quite limited.

Constraints

Inconvenient Access

Blantyre is poorly connected by air. There are no direct flights from Europe or the U.S to Malawi. There are a limited number of flights to Malawi from regional destinations, resulting in high costs and long transit times.

Poor Infrastructure

The lack of adequate roads, telecommunications and energy supply makes travel inconvenient for visitors whether on business or vacation.

Lack of Funding

The Ministry of Tourism has a very limited budget (about US\$300,000 per year).²⁵⁹ As a result, Malawi is unable to market itself as an attractive tourist destination. Further, Malawi does not enjoy the same reputation as an ideal vacation spot compared with regional competitors such as South Africa.

Lack of Tourism Training and Expertise

The Malawi Institute of Tourism is situated in the center of Blantyre and trains workers for the hospitality industry. Since the institute's capacity is very limited, only 300 students can be accommodated per year. As a result, many of the personnel in the hospitality industry remain untrained.²⁶⁰

Lack of Competitive Advantage over Regional Competition

There is a scarcity of tourist attraction sites in Blantyre compared with cities in neighboring countries such as South Africa, Tanzania, and Kenya that are widely known for their wildlife and other attractions.

Competition from Lilongwe

Since the President's official residence was moved from Blantyre to Lilongwe after President Mutharika was elected, many businesses have begun to relocate to Lilongwe in recent years. It is expected that business meetings and international conferences will be increasingly held in Lilongwe, limiting the demand for such facilities in Blantyre.

²⁵⁶ Ministry of Tourism (2006). "Malawi Tourism Report 2006".

²⁵⁷ University of Durham (June 2002). *Malawi Private Sector Partnerships, Tourism Sector Value Chain*.

²⁵⁸ Salad Nthenda, Malawi Tourism Association (March 18, 2008.). Personal interview.

²⁵⁹ Isaac Katopola, Ministry of Tourism, (January 7, 2008). Personal interview.

²⁶⁰ Salad Nthenda, Malawi Tourism Association (March 18, 2008.). Personal interview.

Appendix II. Foreign Direct Investment in Malawi

The principal destination for FDI in Malawi is agriculture, most notably tobacco and sugar. According to the World Investment Report 2007, published by the United Nations Conference on Trade and Development (UNCTAD), Malawi had US\$30 million of FDI inflow in 2006, compared to US\$7 million in 2003. Major sectors of investment in addition to agriculture include telecommunications, manufacturing, tourism, and mining.²⁶¹ The bulk of FDI inflows come from the UK, the US, and South Africa, among others.

Figure 23: Largest Affiliates of Foreign Transnational Companies in Malawi, 2004

Company	Home Economy	Industry	Sales (US\$m)	Employees
A. Industrial				
Illovo Sugar Malawi	South Africa	Agriculture	98	10594
Transglobe Produce Exports	Mali	Food products, beverages and tobacco	3	1800 ²⁶²
Vaimore Paints	United Kingdom	Chemicals and chemical products	1	60 ^y
Limbe Leaf Tobacco Company Ltd.	United States	Food products, beverages and tobacco	-	5300 ²⁶³
Mandala	United Kingdom	Chemicals and chemical products	-	2000 ^y
Bata Shoe Company	Canada	Leather and leather products	-	380 ^y
B. Tertiary				
CFAO Malawi Limited	France	Wholesale trade	2417	300
Metro Cash & Carry Malawi	Germany	Distributive trade	47	1800 ²⁶⁴
CELTEL Malawi Limited	Kuwait	Telecommunications	10	100
Gestetner	Japan	Wholesale trade	4	- ^z
Alexander Forbes Malawi Ltd.	South Africa	Other business activities	-	30 ^z
Continental Discount House Ltd.	Mauritius	Other business activities	-	22 ^z
The Cold Chain	Zimbabwe	Wholesale trade	-	10 ^z
Lipton Tea	United Kingdom	Wholesale trade	-	5 ^z
Hertz Corporation	United States	Automotive trade and repair	-	-
Macmillan Malawi Ltd.	Germany	Education	-	-
Maersk Malawi Ltd	Denmark	Other services	-	-
Fortland Malawi	France	Other services	-	-
Pricewaterhousecoopers	United States	Other services	-	-
Sara Lee Corporation	United States	Construction	-	-
Xerographics	United States	Wholesale trade	-	-
C. Finance and Insurance			Assets (US\$)	Employees
Commercial Bank	South Africa	Finance	161	763 ²⁶⁵
AON Malawi Ltd	United States	Insurance	-	-

Source: UNCTAD WID Country Profile: Malawi, 2006.

FDI incentives available in Malawi include the following:²⁶⁶

²⁶¹ US & Foreign Commercial Service and Department of State (December 2005). *Country Commercial Guide: Malawi*.

²⁶² 2002 data.

²⁶³ Estimate.

²⁶⁴ 2003 data.

²⁶⁵ 2000 data.

²⁶⁶ Malawi Investment Promotion Agency (2007). *Investor's Guide to Malawi 2007*.

General Incentives

- Allowances of up to 40 percent for used buildings and machinery;
- 100 percent investment allowance on qualifying expenditure for new building and machinery;
- 50 percent allowance for qualifying training costs;
- Allowance for manufacturing companies to deduct all operating expenses incurred up to 25 months prior to the start of operations;
- Zero duty on raw materials used in manufacturing;
- Tax losses carry forward of up to seven years, enabling companies to take advantage of allowances;
- Additional 15 percent allowance for investment in designated areas of the country;
- Duty-free importation of buses with a seating capacity of 45 persons (including the driver) and above;
- Duty-free direct importation of building materials for factories and warehouses;
- Duty-free direct importation of goods used in the tourism industry, which includes building materials, catering and related equipment, and water sport equipment;
- Free repatriation of dividends, profits, and royalties.

Incentives for establishing operations in an Export Processing Zone (EPZ)

- Zero corporate tax rate;
- No withholding tax on dividends;
- No duty on capital equipment and raw materials;
- No excise tax on the purchases of raw materials and packaging materials made in Malawi;
- No value added tax.

Incentives for manufacturing in bond:

- Export allowance of 12 percent revenue for non-traditional exports;
- Transport tax allowance equal to 25 percent of international transport costs, excluding traditional exports;
- No duties on imports of capital equipment used in the manufacture of exports;
- No surtaxes;
- No excise tax or duty on the purchase of raw materials and packaging materials;
- A timely refund of all duties (duty drawback) on imports of raw materials and packaging materials used in the production of exports.

Appendix III. Investment Climate/ Opportunities/ Constraints

Investment Climate

According to the World Bank's "Doing Business" report for 2008, Malawi is ranked 127th out of 178 economies in ease of doing business, based on quantitative indicators analyzing business regulations (starting a business, dealing with licenses, employing workers, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and closing a business) and the protection of property rights.²⁶⁷

Figure 24: Malawi's "Doing Business" Report Ranking, 2008

Doing Business 2008	Rank
Ease of Doing Business	127
Starting a Business	108
Dealing with Licenses	117
Employing Workers	90
Registering Property	87
Getting Credit	84
Protecting Investors	64
Paying Taxes	78
Trading Across Borders	161
Enforcing Contracts	135
Closing Businesses	135

Source: World Bank, *Doing Business 2008*.

Opportunities

Political Stability

Malawi has been relatively politically stable since its independence in 1964. There has been minimal violence during the election and campaign periods. The presidential and legislative elections scheduled for 2009 are expected to be very closely contested by the three main parties: the DPP, the United Democratic Front (UDF) and the Malawi Congress Party (MCP).²⁶⁸

Liberalized Economy

The Government encourages both domestic and foreign investors to establish and own business enterprises in most sectors of the economy. Public enterprises compete equally with private entities with respect to access to markets, credit and other business operations.²⁶⁹ To facilitate investment activities in Malawi, MIPA was established in 1994 to oversee and facilitate the investment processes for investors.

Bilateral, regional and multilateral trade and investments agreements

Malawi has the following multilateral and regional trade agreements:²⁷⁰

- **Common Market for Eastern and Southern Africa (COMESA):** COMESA has a potential market of 340 million people and a combined GDP of US\$170 billion. The nineteen member states within COMESA took steps to consolidate the Free Trade Area in preparation for the transition of the COMESA Free Trade Area into a Customs Union that came into force in December 2008.

²⁶⁷ World Bank (2007). *Doing Business 2008* (Washington: World Bank).

²⁶⁸ Economist Intelligence Unit (2008). *Country Profile 2008: Malawi* (London: The Economist Intelligence Unit Limited).

²⁶⁹ Ibid.

²⁷⁰ Malawi Investment Promotion Agency (2007). *Investor's Guide to Malawi 2007*.

- **Southern African Development Community (SADC):** The SADC region has a potential market of 199 million people and a combined GDP of US\$176 billion. Under SADC, Malawi is committed to reducing tariffs on intra-SADC trade progressively. Following the 28th SADC Summit in Johannesburg in August 2008, eleven of the 14 member states of SADC launched a Free Trade Area.
- **African Growth and Opportunities Act (AGOA):** AGOA offers duty and quota-free access to the United States market of 303 million people for 1,835 products, in addition to the standard GSP program.²⁷¹
- **Cotonou Agreement/Everything But Arms (EBA):** This initiative extends duty and quota-free access to the European Union market for all imports from Least Developed Countries, except arms. Minor variations apply to bananas, sugar and rice. Full liberalization will take place for these commodities 2009.

In addition, bilateral trade agreements exist with South Africa, Zimbabwe, and Mozambique, and a customs agreement is in place with Botswana. Further trade agreements are currently under consideration with Zambia and Tanzania.²⁷²

The United Kingdom, the Netherlands, Denmark, South Africa, Norway, Sweden and Switzerland still maintain double taxation treaties with Malawi.²⁷³

FDI Incentives

Tax incentives in Malawi are enshrined in the main tax legislations that include the Customs and Excise Act, the Income Tax Act and the Export Processing Zones (EPZ) Act that came into force in 1995. All companies engaged exclusively in manufacture for export may apply for EPZ status. As of December 2006, sixteen firms were operating under the EPZ scheme. Almost all of these companies are foreign owned. A manufacturing under bond (MUB) scheme offers slightly less attractive incentives to companies that export some, but not all, of their products.²⁷⁴

Dispute Settlement

Malawi is a member of the International Center for Settlement of Investment Disputes (ICSID), and accepts binding international arbitration of investment disputes between foreign investors and the state if specified in a written contract.

Constraints

Landlocked: Limited Port Access & High Transportation Costs

Malawi's landlocked position results in high transport costs that can reach beyond 30 percent of the country's total import bill and constitute a serious impediment to trade.²⁷⁵ The shortest, cheapest trade routes are to the Mozambican ports of Nacala and Beira. Malawi's domestic road network is also inadequate, described by the World Bank in 2007 as 50 percent good, 30 percent fair and 20 percent poor.²⁷⁶

²⁷¹ AGOA.info. <http://www.agoa.info>.

²⁷² Malawi Investment Promotion Agency (2007). *Investor's Guide to Malawi 2007*.

²⁷³ DLA Piper US LLP (November 2007). *Millennium Cities Initiative: Report on the Regulatory Framework for Foreign Direct Investment, Malawi*.

²⁷⁴ US Department of State (2007). *2007 Investment Climate Statement - Malawi*. <http://www.state.gov/e/eeb/ifa/2007/80721.htm>

²⁷⁵ US & Foreign Commercial Service and Department of State (December 2005). *Country Commercial Guide: Malawi*.

²⁷⁶ Economist Intelligence Unit (2008). *Country Profile 2008: Malawi* (London: The Economist Intelligence Unit Limited).

Poor Power & Water Infrastructure

The reliability of electricity supply in Malawi is poor. In 2004, the average company suffered power disruption of 50 days, compared to 48 days in Tanzania and 15 days in Zambia.²⁷⁷

High Interest Rates

Both nominal and real interest rates are among the highest in Africa. According to the IMF, the 2009 projected lending rate is 25.0%, compared to 13.5% in South Africa. The real cost of finance is a major obstacle for firms in Malawi.²⁷⁸

High Input and Production Costs

Because Malawi is heavily dependent on imports, the cost of inputs is expensive, as they frequently have to be brought in from other countries.

Low-skilled Workforce

According to the 2007-2008 Human Development Report published by the UN Development Program (UNDP), adult literacy was 64.1 percent in 2005.²⁷⁹ Malawi's overall ranking in the Human Development Report was 164th out of 177 countries.²⁸⁰ Likewise, skilled and semi-skilled labor is scarce in Malawi.

Limited Access to Capital and Technology

With less than 70 bank branches and only 24 ATMs in a country of about 12 million people, access to banking services remains low. The use of bank cards and telephone and internet banking, though growing, remains below the level observed in other emerging economies. Also, the microfinance industry in Malawi is relatively underdeveloped, with only 20 registered actors and only six providing financial services as their core activity.²⁸¹

Limited Domestic Market Size

Malawi's economy is relatively small with a GDP of US\$2.172 billion in 2006 with limited domestic demand due to low incomes, resulting in weak purchasing power.²⁸²

Meeting International Standards

MBS is the national government body charged with the responsibility of setting, reviewing, monitoring, and implementing grades and standards. However, many of the standards are out of date and need to be updated to reflect changes in international standards. Capacity strengthening of the MBS, in line with private sector requirements for specific testing capability, would substantially mitigate current export constraints.²⁸³

Corruption

Malawi, with a score of 2.7 out of 10 (where 10 is considered "free from corruption") was ranked 118th out of 180 countries in the 2007 Transparency International Corruption Perceptions Index.²⁸⁴ The new

²⁷⁷ Regional Program on Enterprise Development (June 2006). *The Malawi Investment Climate Survey* (Washington, D.C.: World Bank)..

²⁷⁸ Economist Intelligence Unit. *EIU DataServices*. <https://eiu.bvdep.com/frame.html>.

²⁷⁹ Malawi's overall Human Development Index ranked 164 out of 177.

²⁸⁰ UNDP (2008). *2007/08 Human Development Reports*. http://hdrstats.undp.org/countries/data_sheets/cty_ds_MWI.html

²⁸¹ Regional Program on Enterprise Development (June 2006). *The Malawi Investment Climate Survey* (Washington, D.C.: World Bank).

²⁸² Malawi Investment Promotion Agency (2007). *Investor's Guide to Malawi 2007*.

²⁸³ Toomey, David C., Patricia Aust Sterns, and Charles Jumbe (2001). *The Impact of Improved Grades and Standards on the Export Potential of Targeted Commodities in Malawi PFID-F&V Report* (East Lansing, MI: Michigan State University and United States Agency for International Development).

²⁸⁴ Transparency International (2007). *Corruption Perceptions Index 2007*. http://www.transparency.org/policy_research/surveys_indices/cpi.

president Bingu wa Mutharika, has made the fight against corruption his priority. Since then, several senior ruling party officials and three former cabinet ministers have been charged on corruption offenses.²⁸⁵

²⁸⁵ The former Minister of Education is serving a five year prison sentence and the other cases are still pending in court.

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